UNIVERSITY COLLEGE LONDON

ANNUAL REPORT 1978-1979

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FOREWORD BY PROFESSOR HAROLD BILLETT

The 1978-79 session has been a year of change in which I have been privileged to act as Provost between Noël Annan's departure to become Vice-Chancellor of the University of London and the most welcome arrival of the new Provost, Sir James Lighthill, in September 1979. My sincere thanks to all my colleagues who, along with the students, transformed the daunting prospect which loomed before me in 1978 into a taxing but almost entirely pleasurable experience.

It is indeed fortunate that at this critical stage in its history Sir James Lighthill, an outstanding scholar already practised in the art of administration, should be available to accept the leadership of the College and in doing so to demonstrate so openly his vision of the special place which University College holds and must continue to hold in education in this country and indeed in the international community of scholars. We are fortunate, too, that Sir James has been able, before taking up his formal duties, to see so much of our work and become closely acquainted with so many of us. There is no prospect that he can ever be the 'faceless head' so beloved of critics of our universities. He has already demonstrated a keen insight into our problems and is assured of our full support in solving them.

Even before Lord Annan's departure was announced the College was already committed, because of the retirements of Arthur Tattersall and Len Gue, to a massive restructuring of the administration at a time when the demands on administrators grow daily. The sudden illness and death of our much-loved Registrar, Laurence Cahill, accentuated and accelerated this process. That the new machine ran so smoothly and so effectively, in spite of a few teething troubles, pays tribute both to all its members and to the tolerance of everyone else in the College who wished to see it work well.

In academic departments we can take comfort that, in spite of the problems of living in and around London, we are still able to attract scholars of outstanding ability and that the quality of our existing colleagues is such that we supply a quite disproportionate number to fill senior posts elsewhere.

In recent years 'planning' in British universities has depended more and more on guesswork and less and less on hard facts available at a time when planning has any real meaning. For obvious reasons an institution such as University College, dependent on public funds for around seventy per cent of its income, needs to know its recurrent grant well before the beginning of each financial year if it is to make the best use of the money provided. Now that fees form a major part of our income we can make some sort of inspired guess at receipts from that source.

However, just lately, in spite of prodigious efforts by the Court Department in the University, we have rarely had a grant announcement much before the beginning of our financial year and of course in these days of delayed pay settlements we also depend heavily on the early announcement of what supplementary grant we are to receive to account for nationally-agreed awards over which we have no control. In 1979 we have reached what we must hope is the peak of financial absurdity. As I write, we are some three months into the 1979-80 year but we have no idea of any supplementary grant for 1978-79. Still less do we know what our grant is for the current year and yet we are asked to use the current year as a base in telling the government through the University Grants Committee what effect percentage changes in recurrent grant and massive changes in the fee structure for overseas students would be expected to have on our affairs. So now in this Alice-in-Wonderland situation we are expected to predict the effect of a hypothetical change in a hypothetical grant taken along with an unknown distribution of the unknown number of overseas students which may join us from 1980 if their fees are doubled or trebled or worse.

In 1978-79 we were able to budget within £6,000 on the £20m+ of our budget over which we had control. I would be the first to admit that such accuracy involves more than a little coincidence but I am at a loss to know what science, other than one involving a very clouded crystal ball, we should use in the predictions now required of us.

HAROLD BILLETT

Acting Provost, University College London, 1978-79

It is fitting to preface this record of events of the past year by tribute to Professor Harold Billett, whose outstanding leadership and services to the College during twelve months of office as Acting Provost have won the deep and lasting appreciation of Council, staff and students. Our best wishes go to him on his appointment as a Vice-Provost in 1979-80, and with them our affectionate thanks.

Appointment of Provost

The College is delighted that Sir James Lighthill, F.R.S., has accepted appointment as Provost from 1 September 1979. Sir James was educated at Winchester and was awarded a major scholarship to Trinity College, Cambridge before he was 16. He performed with great distinction in the Mathematical Tripos and was appointed a Wrangler. He became a Fellow of Trinity College in 1945. In 1946 he went to Manchester University as Senior Lecturer in Mathematics and was Professor of Applied Mathematics there from 1950 to 1959. He was then appointed Director of the Royal Aircraft Establishment at Farnborough where he remained until 1964. He was appointed Royal Society Research Professor at the Imperial College of Science and Technology until 1969, when he became Lucasian Professor of Applied Mathematics at Cambridge. Sir James was elected a Fellow of the Royal Society in 1953 at the age of 29, and was Physical Secretary and a Vice-President from 1964 to 1969.

Finances

In last year's Report, the hope was expressed that the announcement by the University Grants Committee of grant levels up to 1981 might herald the end of the uncertainties that had characterised the hand-to-mouth experiences of the previous four years. During that period universities had had no clear notion of the level of income which they might expect even in the current year. This cautious optimism survived the announcement of the grant for 1978-79. True, it was made barely twelve days before the commencement of the financial year, but we were relieved that it was not the prelude to a new round of economies – for the first time since 1973-74. And it was accompanied by the promise of supplementation should the level of pay awards and inflation substantially exceed the assumptions it contained. It seemed that the College could concentrate its efforts on the savings necessary to effect the £400,000 economies (£125,000 in staff; £275,000 in Departmental Recurrent Grant) resulting from the continuing reduction in resources inherited from 1977-78. We were even invited to

indicate our recurrent requirements for remedying deficiencies and financing the most urgent development needs – to which we responded with alacrity. In the event, our hopes and those of all universities were completely dashed. The year concluded with a greater degree of uncertainty than ever before and a Deficit of £486,922. The provisional grants announced up to 1981 became wholly meaningless.

The 1978-79 Deficit was attributable entirely to the previous Government's failure to provide adequate compensation for the nationally agreed pay awards during the year. It had acknowledged that further supplementation would be required but had indicated that 'it may not be possible to arrange this until early in 1980'. We shall never know what these arrangements would have been and the year closed with the certainty only that the cuts imposed by the succeeding Government would ensure that whatever back-dated supplementation we might receive would be inadequate to meet the 1978-79 Deficit. We are entering 1979-80 in complete ignorance of the level of grant for the year but sure that it will be less than is needed to meet our existing commitments. Despite this situation, the College has determined to maintain progress and encourage initiative so far as it lies within its power to do so.

The income in 1978-79 amounted to £22,626,795 an increase of £2,424,484 over 1977-78. Expenditure in 1978-79 was £23,113,717 inclusive of the cost of research borne by outside grants which total £4,153,573 compared with £3,548,940 in 1977-78. The number of these grants was 561. Capital grants announced for the year amounted to £513,708 compared with £110,953 for the previous year. Receipts against these and previous capital grants and capital expenditure amounted to £395,045 compared with £95,494 in 1977-78.

Academic Development

Council firmly endorsed a policy of undertaking modest programmes for development in parallel with necessary economies. The savings and development programmes of the Faculties have been designed to take advantage of a changing situation to the benefit of the College's academic priorities.

The College decided that by using a non-recurrent sum of £60,000, available from a Supplementary Grant in 1977-78, certain essential academic developments could proceed. New academic posts were established from October 1978 in the Departments of Architecture and Planning, Fine Art, Geography, Laws, Phonetics and Linguistics and Psychology, even though it was understood that compensating savings would need to be made on a continuing basis were development money not to materialise. Furthermore, where economies targets were exceeded during the year, notably in the Faculty of Arts, additional academic posts have been created from October 1979 in the Departments of Anthropology, English Language and Literature, Fine Art, History and Political Economy.

The difficulties of academic planning have been exacerbated by alterations once again in the student numbers which the UGC now wish to achieve by 1982. It had originally been intended that, in view of higher student fees, the College would use increased numbers of students and the rise in fee income to offset the even larger staffing economies that had been envisaged, but the UGC has since made it clear that attaining a number of students in excess of the permissible target will ultimately result in a reduced unit of resource per student. Uncertainties about student numbers have been compounded by a directive from the Department of Education and Science to reduce the number of overseas students nationally by 2,000, representing for the College a new target of some 100 below the present entry. It would hardly be surprising if the College's aim against moving targets were less than true, but at present there is reason to be confident that the trend in applications will ensure that the College will not be far off its revised target.

College Sites and Buildings

The past year has seen the completion of several building projects in the College. The largest of these is the UCRF decanting building in Bedford Way. This was taken over in December 1978 and the Departments of Psychology and Geography have since been moving into the building by stages. Their moves were completed by the end of the 1978-79 Session. A sub-committee is at work sorting out the many requests from Departments for space in the areas now vacant in the Rectangle.

The completion of the decanting building in Bedford Way led naturally to further discussions with the University Grants Committee over the future of the UCRF scheme for the redevelopment of the Rectangle. Meetings with the UGC and consultation with the Royal Free Hospital School of Medicine have resulted in reconsideration of the whole project by the UGC, and in view of the shortage of capital funds for university buildings the redevelopment scheme is not likely to materialise.

Other projects completed in the Session include the 91-room extension to Ifor Evans Hall paid for by the Anonymous Donor, which was taken over earlier this year and is now occupied. This scheme also includes a small separate Club Room and bar for use by all the occupants of the Ifor Evans Hall/Max Rayne House complex.

More recently completed is the new accommodation for the College's Computer Centre in the basement of the Old Chemistry Building, to house the new GEC 4000 Series linked computer system.

The first stage of the long-term plans for bringing together the whole of the Chemistry Department into and around the Christopher Ingold Laboratories is now complete. This stage involved conversion of the ground floor of the building and the enclosure of the basement garage. The Department's workshops, reading room, microanalysis laboratory, two research suites and some office and seminar space were finished just in time to complete the moves before the start of the next Session. This will leave part of the Department still in the Old Chemistry building, mainly on the top two floors. The completion of the master plan for bringing the whole Department together depends on further funds becoming available.

Two of our more unusual jobs this year have been the installation of a new dome on the Radcliffe Observatory at Mill Hill and a major land drainage scheme at Holmbury St Mary. A number of smaller conversions are in hand and we are about to start on a major refurbishment of Campbell Hall, converting it from a traditional Hall of Residence into a self-catering hostel providing an additional 25 places.

As a result of a grant from the Science Research Council a laboratory for Marine Technology testing machines is now under construction as an extension to the New Engineering

Building. The College is one of five centres in the country where work related to the offshore oil industry is being financed by the Science Research Council.

At long last, the College has embarked on a contract for cleaning the stonework of the Front Quadrangle. The College in its various committees has debated the pros and cons of stone cleaning for many years. The University has provided a special grant to cover the major part of the cost. Work started in June and the effect is dramatically changing the appearance of the Front Quadrangle.

University College Hospital Medical School

The Medical School was advised that a Parliamentary Bill would be needed to effect the dissolution of the Scheme of Incorporation under the National Health Service Act 1946 by which the School is governed, so that its reunification with the College as a new Faculty of Clinical Sciences could be achieved. It was decided to include this provision within the draft Bill effecting transfer of property from the University to the College in consequence of the College's constitution by Royal Charter.

It was a great disappointment to learn that a Member of Parliament had exercised his right to object to the Bill when it came up for Second Reading in the House of Commons at the end of June, having successfully passed all stages in the House of Lords. The objection was made in pursuit of an objective which had nothing whatever to do with the purposes of the Bill. Exigences of the Parliamentary timetable unexpectedly prevented a debate on the Bill in July before the House rose for the Summer recess.

The Medical School and the College have agreed that postponement of the Appointed Day need in no way interfere with the detailed arrangements being made for reunification. The School Council will continue in existence until the date is settled, but the College Council will act as Agents to manage the business affairs of the School with effect from 1 October 1979.

[Since this Report was prepared, the objection to the Bill has been withdrawn and it has received Second Reading. Reunification of the two institutions is expected to be achieved on 1 April 1980.]

As envisaged in the review of the College Administration undertaken by Mr S. W. C. Phillips, to which reference was made in last year's Report, the inter-relationship between Departments and Divisions has been strengthened by organisational changes. The most important change has been the creation of a General Services Division under the direction of Dr A. K. Huggins, a grouping of major services other than those of a technical or professional nature. The Bursar retains responsibilities for buildings and the Finance Officer for financial services. The new Academic Division under Mr C. C. Moore combines the work of the former Academic Administration and Development Planning Divisions.

The Registrar's Department embarked on a major development to introduce a computerised system and following the untimely death of the Registrar, Mr A. J. L. Cahill (an appreciation of whom appears in the supplement to this Report), came under the direction of Mr J. W. Arterton, the former Deputy Registrar. The loss of Mr Cahill at this important stage was a set-back which the Department could ill afford, but swift recovery has been helped by the appointment of Mr D. B. T. Jaynes, previously Assistant Academic Registrar at Chelsea College, as Deputy to Mr Arterton.

The problem of dealing with the affairs of the College under unrelenting financial pressure has not decreased during the session, aggravated as it has been by uncertainty of financial provision. Calls made upon staff, whose response has been magnificent, have not been lightened by the need to scrutinise every vacancy for the sake of economy or by the difficulty of attracting replacement staff as a consequence of uncompetitive salaries.

Various studies in the rationalisation of functions and introduction of new techniques have begun and some will become effective in 1979-80. Participation of College staff in inter-Collegiate activities relating to purchasing and centralised administrative computing services has continued at a high level. The purchasing arrangements pioneered in London have formed a pattern used as a basis by other Universities, either alone or in regional groups.

Staff Training

One of the major activities this year has been the development of the training function. The Sub-Committee on the Training of Teachers has organised a second year of internal development activities for probationary lecturers, building on the experiences of the previous session. In the Technical staff sphere continuing difficulties in the recruitment of certain types of special technical skills has prompted the expansion of the embryonic central training scheme for mechanical and electronic workshop technicians started last year. The University of London has established a committee structure for non-academic staff training (including senior administrative staff) in which the Assistant Secretary (Personnel) and the Principal Personnel Officer (Training and Establishments) are substantially involved. Towards the end of the session 30 staff of various categories from Chelsea, Imperial and University Colleges came together for a two-day staff management workshop at Imperial College.

Student Numbers

On 31 December 1978, 5, 961 students were registered at the College. Of these, 3,990 were full-time undergraduates. 1,515 of these undergraduates were newly admitted to first degree courses, showing an increase of 140 over the equivalent figure in last year's Report.

The total postgraduate student population on the day of count was 1,734 showing less of a decline than in the previous year. 1,330 students were studying on a full-time basis, 404 part-time. Of the full-time postgraduates 53 per cent were following taught courses, while 76 per cent of part-time students were undertaking research for the M.Phil. or Ph.D. Degrees.

Almost one-sixth of the student population is from overseas — 397 students were normally resident in 28 Commonwealth countries and 653 students were from countries other than the Commonwealth. Of the students from overseas, 603 were studying at postgraduate level.

39 per cent of the full-time undergraduate students in attendance at the College were living in halls of residence or other accommodation provided by the College or the University and 20 per cent lived at home; the remainder were in

lodgings or flats. 13 per cent of the postgraduate students were in College or University residences.

During the session four new postgraduate courses were introduced: the University Diploma in Computer Management Studies, the M.A. in Scandinavian Studies (Medieval and West Norse Studies), and the M.Sc. and Diploma courses in Marine Engineering.

At first degree level the course for the B.A. in Archaeology (Classics and Classical Archaeology) was discontinued. The session saw the introduction of a new undergraduate course leading to the B.A. or B.Sc. in Anthropology and Geography.

Academic Matters

From 1 October 1978 the College Department of Human Genetics and Biometry and the Department of Genetics of the Royal Free Hospital School of Medicine were combined in a single Department of Genetics and Biometry at the College under the joint headship of Professor Elizabeth Robson, Galton Professor of Human Genetics, and Professor R. J. Berry, formerly at the Royal Free Hospital School of Medicine. At the same time the Department was transferred from the Faculty of Science to the Faculty of Medical Sciences. It is planned to extend the Department's existing accommodation in Wolfson House.

Also from 1 October the Crystallography Unit, as it is now known, consisting of the Reader in Crystallography, Dr H. Judith Milledge, and three staff, was transferred from the Department of Chemistry to the Department of Geology. This arrangement was considered to be appropriate because the work of the Unit largely concerns diamonds and their conditions of origin at depth in the earth. The Unit occupies the crystallography laboratory situated in the Old Chemistry Building.

The generally acknowledged success of the Intercollegiate M.Sc. course in Ergonomics and the importance of Ergonomics as a subject of academic study have encouraged the University to provide funds for the continuation of the course after 1977-78 and to agree to the appointment of a Reader to the Directorship of the course. The University has done this on the understanding that the course will be based at the College for management purposes and that every effort will be made to obtain financial support from industry, commerce and other outside sources with the aim of making the course as nearly self-financing as possible and certainly in its research aspects. The development of the course has owed much to the energy

and enthusiasm of Dr H. G. Maule who has been Director since October 1973 when he was appointed to a Senior Lectureship in the Department of Mechanical Engineering. He will be succeeded in September 1979 by Dr J. B. Long, who has been appointed to the Readership in Ergonomics and will, because of his field of academic interest, be a member of the Department of Psychology.

The College has accepted the University's offer to make available additional income from the Banister Fletcher Trust Fund to support a Lectureship in Architecture in the Bartlett School of Architecture and Planning. The present arrangements, whereby the University appoints annually a Banister Fletcher Visiting Lecturer who is appointed a Visiting Professor by the College, usually for one term, will continue in parallel with the new post.

When the B.Sc. Degree course in Human Sciences was established three years ago with the aid of teaching from Departments in the Faculties of Arts, Science and Medical Sciences it was planned to attract thirty students and to provide additional staffing once the course had proved its popularity. Over a hundred applications for the course were received in 1978 and thirty-four students are reading for the degree this year. In consequence, a Lectureship to be held in the Department of Anthropology is to be established from October 1979, with special responsibilities for assisting in the organisation of teaching and tutorials for the course.

The Department of History has agreed to assist a project for the writing of a definitive history of Channel Islands Shipping. The States of Jersey and the States of Guernsey have each voted £10,000 towards the venture and an appeal is to be launched to raise substantial additional funds. The College is to act as Trustee for the funds without itself having any financial or other commitment. It has also nominated two members to an Advisory Committee with overall responsibility for the project and from this Committee has been drawn an Editorial Board to oversee the quality and production of the work and review its progress.

University-Industry Collaboration

Early in the year, the UGC announced that it had set on one side a small reserve for the initial support of new projects

involving collaboration with industry and invited proposals from Schools of the University. The outcome of the College's suggestions to the UGC has been a two year 'pump-priming' grant to the recently established Academic Services Unit to set up a post of Industrial Liaison Officer. In addition, grants have been made to assist in teaching two courses to be run in conjunction with Industry. The first is a short course on energy conservation to be run jointly with the RIBA for which a three-year grant has been given; the second involves a project which has been established jointly with King's and Imperial Colleges and GEC to support a one-year feasibility study for a proposed remote teaching experiment using voice bandwidth telephone lines.

Computer Centre

As mentioned earlier in this Report, the new computer accommodation in the basement of Old Chemistry Building was ready for occupation in May 1979. The first three GEC 4082 machines were moved into it shortly afterwards ready to start a user service in October 1979. The telecommunications data exchange and associated wiring throughout College were also partly installed to provide access to the new system. As the GEC system is developed and its facilities are made available to users, the IBM 360/65 service is to be gradually run down ready for a complete shut-down in July 1980. This development will encourage users to move their work to the GEC and other University computers, as well as allowing the Centre to switch more effort to the new service.

Public Lectures

The following public lectures were among those arranged by the College during the session: Barlow Lectures on Dante by Professor Philip McNair (Birmingham) on 'Phoenix into Pelican. Three Studies in the Syncretism of Dante's *Commedia*' (three lectures); Chambers Memorial Lecture by Professor T. Julian Brown (King's College London) on 'Tradition, Imitation and Invention in Insular Handwriting of the Seventh and Eighth Centuries'; Commonwealth Fund Lecture by Professor Morton Keller (Brandeis) on 'American Politics in Comparative

Perspective 1900-1933'; Freud Memorial Lectures in Psychoanalysis by (i) Professor Joseph Sandler on 'Unconscious Wishes and Human Relationships', 'The Inner World: A Psychoanalytic View', 'The Psychoanalytic Psychology of Adaptation', 'Pain and Depression – A Psychoanalytic Perspective' (four lectures) and (ii) Professor Daniel Widlöcher on 'Drive and Psychoanalytical Communication'; Mildner Lecture by Professor C. K. Kao on 'The Coming of Age of Optical Fiber Systems'; Neale Lecture in English History by Professor G. R. Elton (Cambridge) on 'Parliament Under the Tudors: its Function and Fortunes'; Lord Northcliffe Lectures in Literature by Professor D. P. Walker (Warburg Institute) on 'Possession and Exorcism in France and England in the Later Sixteenth Century' (four lectures); Rickman Godlee Lecture by Lord Goodman on 'The Protection of Reputations'; Seton Memorial Lecture by Professor C. N. L. Brooke (Cambridge) on 'The Early Franciscans and Building'; Shearman Memorial Lectures by Mr Michael A. E. Dummett (Oxford) on 'The Justification and Criticism of Logical Laws' (three lectures); Townsend Memorial Lecture by Mr Andrew Forge (Yale) on 'Transatlantic Reflections – Some Remarks on Art in England'.

Inaugural Lectures were given by Professor J. M. T. Thompson (Structural Mechanics) on 'Instabilities and Catastrophes in the Physical Sciences', Professor Valerie Pearl (History of London) on 'Change and Stability in Seventeenth Century London', Professor L. M. Hocking (Mathematics) on 'Slow Flow' and Professor R. E. Allsop (Transport Studies) on 'Transport Studies and the Quality of Life'.

The eighty-third Foundation Oration was delivered by the Right Hon. Lord Denning, Master of the Rolls and Visitor to the College, in the Collegiate Theatre on 12 March 1979. The subject of his oration was 'The Way Ahead'.

An appeal launched to commemorate the life and work of the late Professor R. J. Smeed, CBE, who held the Chair of Traffic Studies at the time of his death in September 1976, has produced a capital sum of £6,000. The income from the fund will be used to finance a periodic public Memorial Lecture in the field of transport planning, operations and safety. In particular, the Lecture is expected to contribute to the improvement of the efficiency and safety of transport by

research and its application. Arrangements are to be in the hands of the Smeed Memorial Committee, with membership drawn from the College and outside.

Health, Safety and Welfare

A number of changes has taken place in the organisation of the College's Health Centre following approval by Council of a report of a Committee of Enquiry established to review the financing and scope of the services provided by the Student Health Association. Perhaps the most significant change has been the creation of a new National Health Service General Practice with Dr A. Linken and Dr P. A. Andersen as partners. This arrangement relieves the College of part of its financial commitment to the running costs of the Health Centre, and has obviated any need to make cuts in the services provided to the College community.

Dr C. J. Lucas, formerly Director of the Health Centre, is now to work on a part-time basis there, having decided to take on an outside consultancy. The administrative duties hitherto performed by Dr Lucas are being undertaken by Dr Andersen as 'Medical Administrator'. Dr Linken, the senior partner in the NHS Practice, has become 'Consulting Physician to Students of University College London'.

The Health Centre has operated since 1945 under the auspices of the Student Health Association. The Committee of Enquiry reported that the arrangements for the use, financing and administration of what is effectively a College Health Centre, as opposed to a Student Health Centre, did not reflect the existence of an Association. With the agreement of the Students' Union the decision was taken to dissolve the Student Health Association, and to create a new committee of management, the College Health Centre Committee, to administer the affairs of the Health Centre and act as a point of liaison between the NHS Practice and the College. The Dean of Students is Chairman of this Committee.

The College has, with the agreement of the various recognised trade unions in the College, formed a new committee called the Joint Consultative Committee on Health, Safety and Welfare. This committee has been set up as a result of the introduction

of regulations under the Health and Safety at Work etc. Act, 1974. It is composed of a number of safety representatives appointed by the Unions, and members appointed by the College. It will provide a very useful forum for discussion between management and the Unions on a wide range of health and safety matters, and will assist both the College authorities and the safety representatives in fulfilling their obligations to employees in respect of health and safety.

In recent years the whole question of facilities for disabled students has been under review at national level. In the College a working party was appointed in 1977 by the Joint Staff-Student Committee to assess the existing provision for disabled students in College and applicants to the College and to recommend upon additional provision. The working party submitted its report early in 1979; on its recommendation, the Council has established a Standing Committee on Disabled Persons continually to review the needs in College of disabled persons (staff as well as students), to advise on the implications of these needs and to make recommendations thereon. The Chairman of the Standing Committee will be the Dean of Students and its membership will include members of the academic and administrative staff with special responsibility for, or interest in, staff and student welfare, student members, a lay member of Council and an observer nominated by the London Borough of Camden.

College Collections

Progress continues to be made on the programme of conservation and restoration, though at a slightly slower rate owing partly to the relocation of the College's paper restorers outside London and partly to the steady erosion through inflation of the purchasing power of the annual grant-in-aid from Finance Committee. Useful contact has been made with the Area Museums Service which should prove of great benefit in the future.

Of particular interest this session, and for which congratulations are due to our Curator, Mrs Mary Lightbown, has been the considerable enlargement of the catalogue of Flaxman's works: so many new items of sculpture have been added to the list that is now proposed to seek outside funds to support a short-term project aimed at reassessing Flaxman's contribution to English sculpture, a development involving a major work of scholarship.

The College is particularly grateful for the generous donations it has received from, among others, the Pilgrim Trust, the Radcliffe Trust and the Friends of UCL, towards the cost of altering and refurbishing the former Refectory Annexe to rehouse the collection of prints and drawings. The scheme is nearing completion and it is hoped that the new Print Room, as it will be known, will be operational at the beginning of next session, a very satisfactory solution to the problems the collection has long suffered in relation to accommodation.

In Egyptology, too, conservation work has continued steadily though it is becoming clear that this programme will still need to be pursued for some years after the initial three-year period for which financial support has been guaranteed; the need is for a continuing and controlled rather than a spasmodic and excessive rate of conservation of objects. There is also a real prospect of more adequate and secure housing for this collection as a result of a general reallocation of space within the Rectangle.

Schools Conference

A wide cross-section of Schools and Colleges in England and Wales sent 67 representatives to the thirteenth annual Schools Conference held on 19 and 20 April, at the end of the Easter vacation. In the course of the conference, members heard talks on all six faculties, on student facilities and on the Library, and each participant visited a total of five different departments admitting undergraduate students. One of the most successful features of these conferences continues to be the opportunity of establishing close personal contacts between the Schools and the College; social occasions outside conference hours are also valuable in this respect. A number of participants has since written to the College seeking permission to bring parties of sixth formers to visit the College or alternatively inviting a member of staff to address groups at their schools. Another important feature is the opportunity to dispel many of the popular misconceptions about the problems of student accommodation in central London; being housed in Ramsay Hall, the teachers are able to sample for themselves the excellence of the College's facilities. The academic work of the College and its concern for the welfare of its students were as usual impressed on conference members.

During 1978-79 the Friends of University College authorised grants totalling £4,460 in support of the following projects: purchase of misting and heating devices for the greenhouses at Shenley Sports Ground (£500); repair of two pianos in the care of the Chamber Music Club (£160); purchase of a secondhand boat for the Sailing Club (£700); purchase of a permanent demountable thrust stage for the Collegiate Theatre (£1,500); purchase of scaffolding for the Theatre Workshop (£200); purchase of a canopy and harness for the Parachute Club (£200); purchase of materials for conversion of the Gliding Club's club-house at Lasham (£250); purchase of curtains for the new Ramsay Reading Room in the Department of Chemistry (£500); purchase of an Honours Cup for the Central Athletics Board to be awarded annually to the outstanding sports team or individual (£250); purchase of twin-deck record-player for the Ballroom Dancing Society (£200). In addition, the Friends contributed £799 towards the purchase for the College Library of part of the Ian Kenyur-Hodgkins collection of Laurence Housman's works.

Since their inception in 1952, the Friends have made grants to College and the Union totalling over £68,000. The Friends continue to be asked for help in providing much to improve and enhance the quality of life in the College for staff and students. If they are to maintain their support, it is vital that both membership numbers and the level of subscriptions and donations be increased.

HONOURS AND DISTINCTIONS

In the New Year Honours in 1979 Sir Walter Perry, Vice-Chancellor of the Open University and a former Statistics student at the College, was created a Life Peer. The following were created Knights Bachelor: Master I. H. Jacob, Senior Master of the Supreme Court, Queen's Bench Division, Fellow of the College; Professor K. Mather, Honorary Professor of Genetics in the University of Birmingham, a former member of the staff of the Department of Eugenics; and Professor W. D. M. Paton, a former member of the staff of the Department of Pharmacology and now Professor of Pharmacology in the University of Oxford. The C.B. was conferred on Dr A. B. Paterson, Director, Veterinary Laboratories and Veterinary Investigation Services, a former Statistics student, and the C.B.E. on Dr A. J. Kennedy, Director of the British Non-ferrous Metals Technology Centre and Fellow of the College.

In the Queen's Birthday Honours the G.C.M.G. was conferred on Sir John Killick, formerly H.M. Ambassador to the U.S.S.R., and the C.B.E. on Professor R. E. D. Bishop, Kennedy Professor of Mechanical Engineering (Research Professor) at the College, and on Dr A. T. James, Head of Division of Biosciences, Unilever Research Laboratory; all three are Fellows. Dr A. Shapiro, lately a psychiatrist and formerly a student in the Faculty of Medical Sciences, was awarded the C.B.E. for services to the mentally handicapped.

In the General Election held in May 1979 several former students were elected or re-elected as Members of Parliament: P. K. Archer (Philosophy) for Warley West, Terry Davis (Laws) for Birmingham (Stechford), R. Hicks (Geography) for Bodmin, B. T. John (Laws) for Pontypridd, A. W. Lyon (Laws) for York, Tom McNally (Economics) for Stockport South, A. S. Newens (History) for Harlow, I. R. Stanbrook (Economics) for Bromley (Orpington) and A. D. Steen (Psychology) for Liverpool (Wavertree).

The title of Honorary Fellow was conferred in 1979 on Sir Alfred Ayer, F.B.A., Wykeham Professor of Logic in the University of Oxford and formerly Grote Professor of Philosophy of Mind and Logic at the College; on Arthur Tattersall, formerly Secretary of the College; and on Eric Gardner Turner, C.B.E., Emeritus Professor of Papyrology, University College London.

The following were elected Fellows of the College in 1979: Gordon Frederick Arnold, Reader in Phonetics, University College London, Sub-Dean of the Faculty of Arts and Tutor to Arts Students; Alan Baker, Professor of Pure Mathematics in the University of Cambridge; Arnold Hugh William Beck, Professor of Engineering in the University of Cambridge and Fellow of Corpus Christi College; Frank Dunlop, C.B.E., Founder, Director, and at present Consultant to the Young Vic; Charles Horace Gray, F.R.C.P., Emeritus Professor and formerly Professor of Chemical Pathology, King's College Hospital Medical School; Bryan Charles Lindley, Director of the Electrical Research Association at

Leatherhead; Klaus Friedrich Roth, F.R.S., Professor of Pure Mathematics (Theory of Numbers), Imperial College of Science and Technology; Lionel Astor Sheridan, Professor of Law and Head of Department, University College, Cardiff; Kenneth Soddy, F.R.C.Psych., formerly Consultant Physician, University College Hospital (Children's and Psychiatric Department), Lecturer in Child Psychiatry; and Charles Albert Vernon, Professor of Chemistry, University College London.

Important appointments announced during the session included those of Professor Sir Andrew Huxley as Chairman of the British National Committee for Physiological Sciences and of T. I. Cline as Principal Educational Psychologist to the Inner London Education Authority. There was a number of elections to academies and learned societies including those of Professor D. E. N. Davies to the Fellowship of Engineering, Professor H. G. Hopkins as a Fellow in the American Society of Engineers, Professor Sir Andrew Huxley as both an Honorary Member of the Physiological Society and a Foreign Associate of the National Academy of Sciences, U.S.A., and Professor Hannah Steinberg as a Distinguished Affiliate of the American Psychopharmacology Division of the American Psychology Association. Within the University of London Professor W. R. Mead was elected to an Honorary Fellowship in the London School of Economics.

Honorary degrees were conferred on members of the College as follows: the D.Litt. of the University of Southampton on Professor J. Hurstfield; the Litt.D. of the University of Liverpool on Emeritus Professor E. G. Turner; the Doctor of Applied Sciences of the University of Melbourne and the Doctor of Arts and Science of the Victoria Institute of Colleges on Sir Ian Wark. Other notable honours were the appointment by the French Government of Professor D. W. J. Johnson as a Chevalier de l'Ordre National du Mérite and the award to Professor Gordon Petrie, a former Engineering student, of the President's Medal of the Photogrammetric Society.

APPOINTMENTS

In the course of the session Miss Elsie Horstead and Mrs Anne Jones became the two members of Council appointed after consultation with the Inner London Education Authority, and P. Laister was appointed a co-opted member. Earlier in the year S. R. Burley and W. Foy, who were already serving on the Investments Committee, were appointed by the Council to the Finance Committee.

At the start of the session Dr Ellzabeth B. Robson, formerly Joint Assistant Director of the M.R.C. Human Biochemical Genetics Unit, was appointed to the Galton Chair of Human Genetics and to the Joint Headship of the Department of Genetics and Biometry with Dr R. J. Berry, previously Professor of Genetics at the Royal Free Hospital School of Medicine, who became Professor of Genetics at the College by conferment of title. In the course of the session Professor T. J. Biscoe, formerly Professor of Physiology and Head of Department at Bristol University

Medical School, came to the Jodrell Chair of Physiology and to the Headship of the Department, and Professor H. P. Rang, formerly Professor of Pharmacology and Vice-Dean of St George's Hospital Medical School, was appointed Professor of Pharmacology and Head of Department. Within the College Professor P. R. Bell, Professor of Botany by conferment of title, was appointed to the Quain Chair of Botany and to the Headship of the Department of Botany and Microbiology, and Professor R. Miledi, Professor of Biophysics and Royal Society Foulerton Research Professor, took over the Headship of the Department of Biophysics. The University of London conferred the title of Professor of Physics on Dr A. Boksenberg, and of Professor of Biology on Dr M. C. Raff.

Dr R. D. Martin, formerly Senior Research Fellow at the Wellcome Institute of Comparative Physiology, was appointed to the Readership in Physical Anthropology, and Dr M. D. C. Gilsenan, Lecturer in the Department of Anthropology, to the Readership in Anthropology. The Readership in Crystallography held by Dr H. Judith Milledge was transferred from the Department of Chemistry to the Department of Geology. The following became Readers by conferment of title: Dr P. F. Clarke (Modern History), Dr W. D. Dover (Mechanical Engineering), Dr G. T. Martin (Egyptian Archaeology), and Dr S. M. Zeki (Neurobiology).

The following Visiting Professors were appointed during the session: Professor W. F. Bodmer, Professor of Genetics, University of Oxford (Genetics and Biometry, Zoology and Comparative Anatomy); E. H. Cullinan, architect, Banister Fletcher Lecturer (Architecture and Planning); M. Ellison, landscape architect (Architecture and Planning); B. Hemmer, Distrikshogskole, Kristiansand, Norway (Scandinavian Studies); J. C. Houck, Director, Virginia Mason Research Centre, Seattle (Biochemistry); Professor W. S. McFeely, Professor of History, Mount Holyoke College, Massachusetts (History); Dr K. Milne, Director of Research at Plessey Radar Ltd (Electronic and Electrical Engineering); Rodrigo Moynihan, painter (Slade School); Dr J. Sandler, President of the European Psychoanalytical Federation (Freud Memorial Visiting Professor of Psychoanalysis); Dr I. Steele Russell, Director, M.R.C. Unit on Neural Mechanisms of Behaviour (Psychology); and Professor A. D. Trendall, formerly Professor of Greek, University of Sydney (Classical Archaeology).

Other College appointments included those of Professor K. J. Ives as Dean of Students in succession to Professor A. P. Mathias and of J. W. Arterton, previously Deputy Registrar, as Registrar from 1 January 1979 in succession to the late A. J. L. Cahill.

There was a number of changes in College Faculty appointments, as follows: Professors A. P. Mathias and J. Musgrove became respectively Deans of the Faculties of Medical Sciences and Environmental Studies; and Professors J. T. Aitken, P. D. Cowan and D. E. N. Davies became respectively Vice-Deans of the Faculties of Medical Sciences, Environmental Studies and Engineering. In the course of the session Dr L. Few was appointed Sub-Dean of the Faculty of Science in succession to Dr C. Dodd.

During the year announcement was made of the following appointments of members and former members of the College to academic posts outside

the College: Professor A. B. Atkinson to a Chair of Economics at the London School of Economics, Dr P. R. Freeman to the Chair of Statistics at the University of Leicester, Dr D. R. Harris (Geography) to the Chair of Human Environment at the Institute of Archaeology, Dr D. R. Harris (Spanish and Latin American Studies) as Professor of Spanish and Head of Department, University College Galway, Dr L. H. Smaje to a Readership in Physiology and Headship of the Department at Charing Cross Hospital Medical School, Dr J. W. Black as a Wellcome Visiting Professor at the Mount Sinai Medical Centre, Professor W. G. Chaloner to the Hildred Carlile Chair of Botany at Bedford College, Professor E. J. Jory to a Chair of Classics and Ancient History, University of Western Australia, Dr M. H. Lader as Professor of Clinical Psychopharmacology at the Institute of Psychiatry and Miss Susan Strange to the Montague Burton Chair of International Relations at the London School of Economics. Professor D. V. Lindley was appointed to an honorary professorship in the Department of Statistics, University of Warwick and Dr Anne McLaren as a Wellcome Visiting Professor in Basic Medical Sciences at the Mount Sinai Medical Centre. Professor Valerie Pearl was elected by the University of Oxford to the Ford Special Lectureship to be delivered in Trinity Term, 1980.

RETIREMENTS

Professor George Dawson retired from an Established Chair in the Department of Physiology in September 1979. He had held the Chair since early in 1966. but his association with the Department began ten years earlier when he began to help with research and specialised teaching first as an Honorary Research Associate, then as an Honorary Lecturer. The present strength of neurophysiological research here is largely a result of his influence. After an early training in Manchester, in both physiology and medicine, George Dawson became interested in the recording of electrical signals from the human brain. The usefulness of such recordings in the diagnosis and management of epileptic patients has been a life-long interest which he will continue to explore in an active retirement spent partly at the Institute of Neurology. The fruitful application of electronic knowledge to physiological and clinical problems led George Dawson to be one of the first in this country to exploit computers for enhancing the scope of biological experimentation. This continued expertise has been of great value during his long service on the Flying Personnel Research Committee, Ministry of Defence; the Physiological Sub-Committee of the F.R.P.C. and the Computer Advisory Committee of the Medical Research Council.

Professor George Drew, Head of the Department of Psychology since 1958, retired at the end of the Session. His first Degree from the University of Bristol was in Philosophy and English but while a postgraduate student at Cambridge he was attracted to experimental psychology by Sir Frederic Bartlett. A Rockefeller Research Fellowship took him in 1936 to Harvard University for two years, where he carried out research with Professor Karl Lashley into animal learning and behaviour. At the outbreak of the

Second World War he was holding a Research Fellowship at Cambridge and in the early war years he collaborated with other members of the Department of Experimental Psychology in the solution of important human factor problems especially in relation to flying. In 1942 he joined the Training Research Department of the Air Ministry. At that time he was Head of the Section concerned with aircrew selection; by the end of the war he was Head of the Department. In 1946 he went back to Bristol University as Lecturer-in-Charge of Psychology and was later the Foundation Professor and Head of Department of Psychology there until he came to University College. During his tenure of the Chair, the Psychology Department here became a recognised biological science department. Professor Drew maintained his wide range of research interests and this was reflected by his Honorary Directorship of an M.R.C. Unit concerned with the role of brain mechanisms in animal behaviour and by his initiation of an influential Unit dealing with problems of industrial retraining. The period of his leadership saw the Department grow into one of the largest in the College. He regarded the establishment of a sound teaching programme as of great importance; and countless students will recall his kindness in helping them with personal problems. As a result of his wide knowledge of all aspects of personnel research he was in much demand as an adviser to many Government and other national agencies. Equally, his breadth of knowledge led to his opinion being sought by many national psychological societies and by organisations such as the Research Councils who needed an objective view of a problem. He will be particularly remembered for his firm but considerate approach as a Chairman of any group and for the care which he took to make himself well-informed on any topic. He was the obvious choice as President of the International Congress of Psychology when it took place in London in 1969. His skills as a Chairman were particularly valuable to the College as Dean of the Faculty of Science from 1973 to 1976 at a time when the College had to find just ways of making economies to meet the financial difficulties which all Universities were then beginning to face. During recent years his resourcefulness and sound judgement were in much demand within the College. His friends throughout the College will be pleased to hear that he will continue his association with the Psychology Department in an honorary capacity.

Professor Joel Hurstfield, who retired in September 1979, began his connection with the College as a student in 1931, took his First in History in 1934, did research under Professor Neale, and went to University College, Southampton, as an assistant lecturer in 1937. In 1942 he became Official Historian in the offices of the War Cabinet and subsequently contributed to the official war history his important book, *The Control of Raw Materials.* After five years as lecturer at Queen Mary College (1946-51) he returned to the College as lecturer in 1951, became Reader in 1953, Professor of Modern History in 1959, and succeeded the late Mark A. Thomson as Astor Professor of English History in 1962. His post-war return to Tudor historical scholarship was signalled by the appearance in

1958 of *The Queen's Wards,* followed by a number of other distinguished publications, and as Neale became less active he took over the guidance of the very active postgraduate work in the University in this field. Members of this circle produced a presentation volume of essays in his honour on his retirement. Elected Fellow of the College in 1963, he was Dean of Arts, 1964-66, and Head of the History Department, 1966-70. With a ready-flowing wit he was an outstanding University Public Orator (1967-71). His retirement will be partly spent as a Senior Research Fellow at the Huntington Library, San Marino, California, and Tudor historians look forward to the early completion of his *magnum opus* on the great statesman Robert Cecil, first Earl of Salisbury.

Professor M. A. Millner, who retired in September 1979, joined the Department of Law in 1960 as a Reader in English Law. Professor Millner was born in South Africa. From 1939-43 he was a lecturer in Law at Witwatersrand and then after a period of war service took up practice at the Johannesburg Bar until 1954 when he was made a Senior Lecturer in Law at the University of Witwatersrand. In 1959, he was appointed a lecturer in Law at Queen's University of Belfast. In 1969 he was given the title of Professor of Law at University College. In the area of teaching Professor Millner made his mark over a wide range of subjects for which his profound knowledge of three different legal systems, namely, Roman Law, Roman-Dutch Law, and English Law, placed him in an exceptionally favourable situation. His written contributions in all these areas have been notable for their scholarly quality. In recent years his particular interest developed in the field of Tort, especially from a comparative point of view, and his major work on the 'Law of Negligence', published in 1967, became quickly established as a leading contribution in that field. Professor Millner enjoyed the affection and regard of his colleagues who much appreciated his deeply thoughtful and scholarly approach.

Dr Cyril Dodd retired at the end of December owing to ill-health. He had been a student from 1933 until 1938, and an Assistant Lecturer in 1938-39. After lecturing at St Andrews and Cambridge and serving in the Ministry of Supply, he returned to College in 1944 and served continuously until his retirement. He became Reader in Physics in 1956, and Tutor to Science Students in 1965. His first research work was a study of liquids and their metastable states. Later he converted to nuclear physics and became an expert on the design and operation of bubble chambers. In fact, after a visit to America in 1955 to learn about this new device, he returned and built the first bubble chamber ever made in Europe. While the bubble chambers that he helped to develop continue in use around the world, Dr Dodd became more involved in his teaching and tutorial work. He was largely responsible for the smooth operation of the new 'course unit' degree in the Faculty of Science, taking endless trouble to make the best possible arrangements for the odd man out whose requirements did not at first seem compatible with the system. Dr Dodd was elected a Fellow of the College in 1974.

Miss M. S. Drower (Mrs C. Hackforth-Jones) retired at the end of the Session from her Readership in the Ancient History of the Near East. She

first entered University College in 1931 as a student in the Department of Egyptology (then still presided over by Professor Sir Flinders Petrie) and gained First Class Honours in 1935. In 1937 she was appointed as Assistant Lecturer in Ancient History, becoming a Lecturer in 1940, Senior Lecturer in 1957 and Reader in 1966. During that period she has built up a unique and extremely exacting course covering the history of the Near East from the third millenium B.C. to Alexander, which is taught over a two-year cycle, provides two papers for History Branch IA and is attended also by undergraduate and graduate students from the Institute of Archaeology and the School of Oriental and African Studies. A dedicated teacher and an endlessly helpful colleague, possessed of an inexhaustible curiosity in her field, and an undaunted traveller always ready to set off to Samarkand, Lake Van or the Sudan, Peggy Drower has never allowed her heavy academic commitments to crowd out wider interests (she was for many years Honorary Secretary of the Egypt Exploration Society and is now its Chairman) or outweigh a happy family life. She remains in the College as an Honorary Research Fellow of both the Egyptology and the History Departments, and will be working on her eagerly-awaited biography of Flinders Petrie.

Dr Lilian Haddakin's long association with the College and above all with the English Department – as student, teacher and tutor – ends with her retirement this Session. Her devotion to the interests of students, and her skill and tireless understanding as tutor to hundreds of undergraduates, will be very much missed. And not only undergraduates. None of her colleagues can have supervised so many postgraduate students to success in their higher degrees. Men and women of many nationalities, virtually 'from China to Peru', have completed their first projects of literary research under her humane and learned guidance. As a scholar, she is probably best known through her writing in the field of nineteenth-century literature. Her critical study of Crabbe's poetry is the first substantial modern work on the writer in whom (with 'Peter Grimes') fresh interest was stimulated also by Benjamin Britten. In quite another field, she had edited the *Writings on Dance* of her late husband, the ballet critic A. V. Coton (Edward Haddakin), who was like Lilian much loved in the Department and a good friend of its student activities.

Harry Marriott joined the Department of Electrical Engineering as a Temporary Lecturer in 1940 while the Engineering Faculty was evacuated to University College, Swansea. He became Tutor to Engineering Students and Sub-Dean of the Faculty when the Department returned to Gower Street in 1945 and became a permanent member of staff in 1946. He was promoted Senior Lecturer in 1952 and while still continuing as Tutor to Engineering Students, became Senior Tutor in 1972 holding both posts until he retired in September 1979. His service as Tutor and Sub-Dean is probably unparalleled in the history of the College and will be remembered with affection by some twenty Deans of the Faculty of Engineering, hundreds of members of staff and thousands of students. He was the master *par excellence* of the University's regulations. In addition he was

for many years editor of various College prospectuses and served on the editorial board of this Report. His efficiency and precision were matched only by his humanity, particularly in his dealings with undergraduates. His many friends wish him and his wife well in their retirement to Wales.

Ronald Staveley, Senior Lecturer in the School of Library, Archive and Information Studies, retired at the end of this Session. He was appointed Lecturer at the School in 1947 and played a major role in the post-war development of education for librarianship in the U.K. He was the first president of the Association of British Library Schools, and advised on the establishment of librarianship courses in other institutions. He has been a Senior Examiner for the Library Association, served on a number of its committees and on those of Aslib, and twice visited Japanese libraries as a British Council adviser. He became Director of Library Studies in 1969, and was largely responsible for the development of higher degree work in Library Studies from 1967. His own distinctive teaching contribution and the majority of his publications were in bibliographical studies. In recent years he pioneered the Study of Reading as an area of academic research.

Miss Olive Tooley had the distinction of being one of the small band of teachers, chosen by Daniel Jones, who were to resuscitate the Department of Phonetics after its wartime enfeeblement. She joined the staff in 1944, and for thirty-five years taught with undiminished enthusiasm and dedication. Her main interest lay in the field of English Phonetics which she presented to speech therapists, foreign teachers of English or mature evening students with the same freshness and meticulous attention to detail. Her clear and youthful voice will echo round the world for many years to come in the numerous English courses which she recorded. Above all, her students will remember her with respect and affection for the unstinting kindness and patience which she showed them; her colleagues will miss a good-humoured and loyal friend, whose standards were unwaveringly high.

Laurence Wigglesworth retired at the end of the session after serving as an Assistant Lecturer in the Department of Applied Mathematics from 1935 until 1938, and as Lecturer and Senior Lecturer in the Department of Mathematics continuously from 1947. He acted as Departmental Tutor from 1970 until his retirement. He was an excellent teacher, and generations of mathematicians and engineers will remember him with gratitude. Married to Miss Keir of the Department of Psychology, he played a very full part in the social and musical life of the College. He had been a student from 1930 until 1934 and was elected a Fellow of the College in 1977.

Charles Evans retired as Laboratory Superintendent of the Department of Physiology in August 1978 after working for the Department and College since 1926. He started at the age of 14 as technician to the then Jodrell Professor, Charles Lovatt Evans. He became well known to and greatly appreciated by many generations of students, an impressive number of whom achieved great distinction in their subsequent careers in medicine and science but who still look upon Charlie as their friend and

mentor. He made an outstanding contribution to organising the evacuation of the preclinical school from Gower Street to Leatherhead and the subsequent return to London. In addition to his key role in departmental organisation over several decades he continued to take an active and enthusiastic part both in teaching and research. During his last ten years in College he has emerged as a research worker in his own right; this was recognised by the Physiological Society which elected him to membership in 1976. The Physiological Society had additional reasons for admiration. Since it was founded here in 1876 the AGM has been held in College every March. It was upon Charlie that the burden fell of organising these increasingly complex meetings, a task which he carried out with unfaltering efficiency over many years. We are fortunate that Charlie has been persuaded to remain in a part-time research post in the department. We greatly value his continued enthusiastic contribution to research and teaching as well as his general advice and help based on such long and effective service to the College.

RESIGNATIONS FROM COUNCIL

In September 1978 the Council lost the services of two Co-opted Members, the Hon. Jacob Rothschild and John Vickers, who had joined the former College Committee in March 1967 and January 1974 respectively. We should like to thank them very much for all they have done in support of the interests of the College.

OBITUARY

We record with regret the death during the year of a number of members and former members of the College. They included one Honorary Fellow and fifteen Fellows.

The College mourns the death of F. J. Stephens, elected an Honorary Fellow in 1958. He was appointed a member of the former College Committee in 1953 and became its Vice-Chairman in 1963, as well as serving on several other standing committees of the College. We owe him much also for his efforts on our behalf in appeals to Industry.

We were much saddened, last July, to learn of the death of Professor Arthur Brown, Professor of English from 1962 to 1969 and Professor of Library Studies from 1969 to 1973. [An appreciation of Professor Brown was published in the Annual Report for 1972-73.]

Claude Rogers, one of the most substantial figurative painters of his generation who died at the age of 72 on 18 February, was the son of a dental surgeon established in Buenos Aires. After attending St Paul's School in London, he entered the Slade where he was recognised by Professor Tonks as an outstanding talent. In the 1930s he was one of the three painters who founded The School of Drawing and Painting in the Euston Road which gave its name to a tendency of some significance in British painting. His ebullient enthusiasm made him a splendid teacher as a long succession of students at Camberwell, at the Slade and at Reading University, where he was appointed Professor of Fine Art in 1963, have

testified. Artists owed much to his leadership as President of the Londo Group and Chairman of the Fine Art Panel of the National Council fc Diplomas in Art and Design, but he was always first and foremost a painte Claude Rogers was an absolute master of the blunt and forthright statemer in paint. He is survived by his widow, the painter Elsie Few, and by a so

Other Fellows who died during the year were the Very Reverend S Israel Brodie, Emeritus Chief Rabbi of the United Hebrew Congregatior of the British Commonwealth of Nations; Professor H. J. Channor Biochemical Consultant and formerly Research Director, Unilever Limitec Dame Marjorie Cox, formerly Deputy Secretary, Ministry of Pensions an National Insurance; G. W. L. Harding, formerly Director of the Departmer of Antiquities, Hashemite Kingdom of Jordan; A. J. Hill, Chairman c Taylor Woodrow Construction Limited; A. S. Hornby, author of standar dictionaries and text books for overseas students learning English; Si William Hudson, Chairman, Hawker-Siddeley, Australia; Bernard Leach founder and Director of the Leach Pottery, St Ives, Cornwall; Majo General A. N. T. Meneces, formerly Commandant and Director of Studie at the Royal Army Medical College, Millbank; R. C. Mildner, Researc Scientist with Dow Chemical Company Limited in Midland, Michigan; Si Allan Quartermaine, formerly Chief Engineer, British Railways (Wester Region); Sir Alec Randall, formerly H.M. Ambassador to Denmark; an Sir Edward Salisbury, formerly Quain Professor of Botany and sometim Director of the Royal Botanic Gardens, Kew.

Five members or former members of the staff died during the year.

Longer-serving members of the College will learn with regret of th death, in July, of John Whitfield. He had been a Reader in the Departmen of Psychology for about thirty years, and was Acting Head of the Depar ment from 1956 to 1958 following the return of Professor Roger Russe to the U.S.A. On his appointment to the Readership, the MRC moved th Industrial Psychology Research Unit to the Department and, during th first few years, John Whitfield was very actively involved in the work of a its members. His main research interests were in statistical theory and i the application of psychology to the solution of industrial problems especially investigating the causes of accidents. In his early years here h made significant contributions in both fields. He was extremely good witl students and had a great gift for judging their potential. He had a wid circle of friends throughout College. Unfortunately, he became increasingl incapacitated by an illness which forced him to withdraw into a rathe solitary life and which prevented him from continuing to make the contri butions of which he was capable. However, following an extended perio in hospital some five years ago, he made a quite astonishing recovery and although very deaf, became active once more both in teaching and i research. At the time of his death he had several papers in preparation. H was a very cultured man with an acute intellect. His outstanding character istics, however, were his great kindness and unfailing courtesy. Those of u privileged to know him well will miss him greatly.

T. E. Venis joined the then Physics Department in 1960 to work witl

the newly-formed Engineering Design Group, set up by Sir Harrie Massey to handle the larger and more sophisticated engineering projects which were becoming a feature of physics research. Tom assumed responsibility for the work of this group after the death of H. S. Tomlinson in 1971. The most remarkable achievement of the Engineering Design Group during Tom's leadership is the uniquely successful series of stabilised balloon-borne telescopes for use by astronomers working in the Infra-Red and Ultra-Violet spectral regions. Tom Venis suffered from ill-health for many years and frequently underwent prolonged and painful treatments with great courage and unfailing cheerfulness. His untimely death on 8 December 1978 is a serious loss to the Department of Physics and Astronomy.

Many friends and colleagues in the College and in the University were particularly saddened by the sudden death just before the end of the Autumn Term of A. J. L. Cahill, for twenty-four years Registrar of this College. Lawrie Cahill's association with the College, however, began much earlier since he was a student in the Department of Political Economy in the early 1930s, graduating with a B.Sc.(Econ.) degree in 1936 and after distinguished military service during the war became Publications Assistant here for a short time before taking up a post at Senate House. When he returned to University College it was to take over a small and, in functions, limited Registrar's Department which he had been charged with updating and reorganising. This he did with enormous enthusiasm and extraordinary competence and among his many achievements the splendid records system which he introduced has been the envy of all and a model for many. It is especially sad that someone so forward thinking and receptive to change should have been prevented in the year of his retirement from seeing the introduction of the new computerised College Registry Service in which he had been so closely involved.

Michael Abercrombie, F.R.S., Professor of Embryology, later Jodrell Professor of Zoology and Head of the Department of Zoology from 1962 to 1970, died in May 1979, aged 67. He came to the College from Birmingham University in 1947, and left to become Director of the Strangeways Laboratory. A pupil of E. S. Goodrich, he was one of the distinguished group of young Oxford zoologists who were attracted into research on wound-healing during the war. Jointly with his wife M. L. Johnson he made important contributions to our understanding of Wallerian degeneration of nerve. After rejoining J. Z. Young in the Department of Anatomy, he commenced a life-long study of mammalian cells in tissue culture. His group laid the foundations of modern quantitative work on the social behaviour of cells. They discovered contact inhibition and the ruffled edge of moving fibroblasts. This led to the key concept of a malignant cell phenotype. With M. L. Johnson he edited *Penguin New Biology* for seventeen years, a series in which appeared most of what was interesting in biology at the time. His *Dictionary of Biology* is still in use. His principle achievement, perhaps, is his part in unifying embryology, cancer biology, and the study of cells from adults.

Roy Smith died in January 1979. He was appointed in 1958 as Senior

Works Clerk and in 1962 as Assistant Establishment Officer, a post he held until his resignation for medical reasons in 1977. His wide range of duties brought him into contact with staff at all levels and he made a notable contribution to the harmony of relations between the Students' Union and the College.

Other former members of staff who died in the course of the year were: Dr Julia Bell, a member of the staff of the Department of Eugenics, Biometry and Genetics from 1908 to 1965; H. E. Foster, a member of the administrative staff from 1920 to 1954 and Registrar from 1932 to 1954; and H. J. Coates, a member of the technical staff (Anatomy and Embryology) from 1947 to 1977.

PUBLICATIONS

BY MEMBERS OF COLLEGE DEPARTMENTS

1 AUGUST 1978 – 31 JULY 1979

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APPENDIX I

NUMBERS OF STUDENTS, 1978-79

	Under-graduate		*Post-graduate*		*Total*	
Faculty of Arts	1,403	(218)	355	(116)	1,758	(334)
Department of Political Economy	263	(0)	26	(4)	289	(4)
Slade School of Fine Art.	104	(3)	103	(6)	207	(9)
	1,770	(221)	484	(126)	2,254	(347)
Faculty of Science	1,256	(0)	*592	(144)	1,848	(144)
Faculty of Medical Sciences	316	(0)	1	(1)	317	(1)
Faculty of Engineering.	425	(1)	235	(50)	660	(51)
Faculty of Laws.	305	(14)	154	(38)	459	(52)
Faculty of Environmental Studies	155	(1)	268	(45)	423	(46)
	4,227	(237)	†1,734	(404)	5,961	(641)

The figures in brackets indicate the number of part-time students included in the total under each head.

* This figure includes 95 full-time and 31 part-time students working in the College Faculty of Medical Sciences who were registered in the University Faculty of Science.

† If this number 992 full-time students and 354 part-time students were registered for higher degrees of the University of London; the remainder were working for higher diplomas of the University or of the College, or for the higher degrees of other Universities or were engaged in research work, or attending postgraduate lecture courses.

Figures are based on the population as at 31 December 1978, the official UGC day of count.

APPENDIX II

UNIVERSITY FIRST DEGREE AND DIPLOMA AWARDS

1 OCTOBER 1978 – 30 SEPTEMBER 1979

FACULTY OF ARTS

B.A. Degree	*1st Class Honours*	*2nd Class Honours Upper Div.*	*Lower Div.*	*3rd Class Honours*	*Pass*	*Total*
Classics	1	3	3	1	1	9
Classics and Ancient History	1	1	–	–	–	2
English	2	16	23	10	–	51
Fine Art	4	5	7	3	–	19
French	2	9	18	2	–	31
Geography	3	18	14	4	–	39
German	1	8	5	3	–	17
Hebrew	–	1	2	–	–	3
Hebrew Literature and Jewish History	1	–	1	–	–	2
History	7	32	12	1	–	54*
History of Art	–	11	9	1	–	21
Italian	–	3	–	–	–	3
Linguistics	2	4	–	1	–	7
Medieval Archaeology	1	3	4	–	–	8
Modern Iberian and Latin American Regional Studies	–	4	3	1	–	8
Philosophy	1	14	6	1	–	22
Scandinavian Studies	–	3	–	–	–	3
Ancient History and Social Anthropology	–	–	2	4	–	6
Anthropology and Linguistics	–	–	1	–	–	1
English and History of Art	–	4	4	–	–	8
English and Linguistics	–	1	1	–	–	2
French and Philosophy	–	–	1	–	–	1
German and Linguistics	–	–	1	–	–	1
German and Norwegian	1	–	1	–	–	2
German and Swedish	–	2	–	1	1	4
History and History of Art	–	2	2	–	–	4
Italian and History of Art	–	1	1	–	–	2
Norwegian and Icelandic	–	–	1	–	–	1
Philosophy and Economics	–	–	2	–	–	2
Philosophy and History of Art	–	–	1	–	–	1
Philosophy and Linguistics	–	–	–	–	–	1†
	27	145	125	33	2	335

niversity Diploma in Fine Art: 1 Student passed

2 Candidates awarded Aegrotat degree

This candidate awarded Aegrotat degree

FACULTY OF LAWS

LL.B. Degree	*1st Class Honours*	*2nd Class Honours Upper Div.*	*Lower Div.*	*3rd Class Honours*	*Pass*	*Total*
	2	27	51	9	—	89

FACULTY OF MEDICINE

Basic Medical Sciences and Pharmacology Examination: 131 Students passed. Second Examination for Dental Degrees: 43 Students passed.

FACULTY OF SCIENCE

B.Sc. Degree	*1st Class Honours*	*2nd Class Honours Upper Div.*	*Lower Div.*	*3rd Class Honours*	*Pass*	*Total*
Anthropology	2	10	13	—	—	25
Applied Physics	—	—	2	6	2	10
Architecture	5	13	15	10	3	46
Astronomy	3	2	9	—	1	15
Astronomy and Physics	1	2	3	3	—	9
Biochemistry	2	5	9	2	—	18
Biology	—	1	3	—	—	4
Botany	—	—	5	—	—	5
Chemistry	4	9	10	3	—	26
Chemistry and Physics	2	—	—	1	1	4
Combined Science	—	—	—	—	1	1
Computer Science	—	2	4	—	3	9
Genetics and Microbiology	1	1	3	1	—	6
Genetics and Zoology	—	—	—	1	—	1
Geography	1	14	11	2	—	28
Geology	—	1	4	—	—	5
Human Sciences	—	3	4	1	1	9
Information Science	—	—	—	1	—	1
Mathematics	4	2	11	10	1	29*
Medical Chemistry	5	4	3	1	—	13
Microbiology	2	6	11	2	—	21
Pharmacology	—	5	3	—	—	8
Physics	4	4	6	6	2	22
Physiology	—	3	4	—	—	7
Psychology	8	19	18	2	—	47
Statistics	2	1	2	1	—	6
Statistics and Computer Science	—	1	3	1	—	5
Zoology	1	4	12	2	—	19
	47	112	168	56	15	399

* 1 Candidate awarded Aegrotat Degree

B.Sc. (Intercalated) Degree	*1st Class Honours*	*2nd Class Honours Upper Div.*	*2nd Class Honours Lower Div.*	*3rd Class Honours*	*Pass*	*Total*
Basic Medical Sciences and Anatomy	4	5	2	–	–	11
with History of Medicine	1	4	4	–	1	10
with Human Biology	1	3	1	–	–	5
with Human Genetics	1	2	1	–	–	4
with Immunology	1	4	4	–	–	9
with Microbiology	–	1	–	–	–	1
and Pharmacology	1	1	1	–	–	3
and Physiology	1	5	–	–	–	6
with Psychology	–	9	5	–	–	14
	10	34	18	–	1	63

FACULTY OF ENGINEERING

B.Sc. (Engineering) Degree	*1st Class Honours*	*2nd Class Honours Upper Div.*	*2nd Class Honours Lower Div.*	*3rd Class Honours*	*Pass*	*Total*
Biochemical Engineering	1	2	2	1	1	7
Chemical Engineering	3	4	8	2	1	18
Civil Engineering	7	12	9	7	2	37
Electronic and Electrical Engineering	2	5	4	5	7	23
Electronic Engineering with Computer Science	4	4	3	4	–	15
Mechanical Engineering	3	4	3	4	4	18
Naval Architecture	4	3	1	3	1	12
	24	34	30	26	16	130

FACULTY OF ECONOMICS

B.Sc. (Economics) Degree	*1st Class Honours*	*2nd Class Honours Upper Div.*	*2nd Class Honours Lower Div.*	*3rd Class Honours*	*Pass*	*Total*
Economics	4	7	17	6	2	36
and Economic History	–	3	4	1	–	8
and Geography	1	3	7	–	–	11
and Social Anthropology	–	1	1	–	–	2
and Statistics	–	–	–	2	–	2
	5	14	29	9	2	59

APPENDIX III

UNIVERSITY HIGHER DEGREE AND HIGHER DIPLOMA AWARDS
1 OCTOBER 1978 – 30 SEPTEMBER 1979

FACULTY OF ARTS

Ph.D. *Classical Archaeology:* Catherine E. H. Hamsher. *English Language and Literature:* Barbara J. Daniels, Laurel T. Goldman, Philip H. Holland, Stoddard H. Martin, Philip B. Morrison, Jacqueline S. Rose, Richard D. Webber. *French Language and Literature:* Jill M. Tattersall. *Geography:* Francis W. Carter, Hugh D. Clout, Oiva W. Saarinen. *German:* Christopher D. Waller. *Hebrew and Jewish Studies:* Eleazar Gutwirth. *History:* John C. Grayson, Thomas H. Gretton, Edward C. Harris, Doris W. Jones-Baker. *History of Art:* Valerie L. Wainwright. *School of Library, Archive and Information Studies:* Deborah Avriel, Sayed A. Mirzadeh, Gholamhosain Tasbihi. *Philosophy:* Alfred C. Reeves. *Phonetics and Linguistics:* Gunilla M. Anderman, Shulamuth Chiat, Desmond C. Derbyshire, Robin P. Fawcett, Marie M. Palyza, Susan M. Ramsaran. *Scandinavian Studies:* Annette J. Godefroit, Kathleen J. Kilmurry, Susan M. Margeson. *Spanish and Latin American Studies:* Evelyn Fishburn. (33)

M.Phil. *Bartlett School of Architecture and Planning:* Peter D. Bevan, Peter R. Bibby, David Biran, Peter M. Dawson, Michael W. J. England, David R. Ferguson, Opuenebo B. George, Florabelle L. Grenade, William J. Hayes, Philip R. Henry, Theodoor J. Hirsch, Vanessa C. Howe, Dennis G. Jones, Nora D. Miller, Che L. Pun, Kimberly A. Robinson, Janette D. Shaw, Simon Smith, Alun H. Thomas, Eileen M. Watson, Stephanie J. Yabsley. *German:* Philip E. Morris. *History:* Susan E. Banfield, Laurence J. Keen. *Philosophy:* Timothy A. White. (25)

M.A. *Architecture:* Trevor C. Farnfield. *Area Studies:* Marcio A. P. L. Cunha, Ronald Currie, Benjamin L. Diaz Castaneda, Gerardo Garcia-Huidobro Severin, Ximena George-Nascimento Lara, Lawrence I. Iles, Harriet H. Joseph, Linda J. Kelley, Peter J. Ling, *Robert P. Musgrove, Timothy J. Nicholls, Ella M. G. Parra, Joel Pfister, Oscar X. Rodriguez-Aguilar. *Classics:* Soteroulla Constantinides, Frederico Gamberini. *English:* Nina G. Anstee, Gopa Roy, Christopher J. P. Williams. *German:* John A. Gorman, Monika R. King, Katherine J. Marles. *History:* Peter K. Mason. *Library and Information Studies:* Judith D. Atkinson, John F. Blagden, David A. Botten, *Hugh D. Brazier, Sarah A. Clare, John J. Eyre, Audrey M. Hall, Mary E. Hartley, Dennis F. W. Hawes, Roger D. Hawkes, Margaret M. Hogan, Alice Lee, Lesley J. Lemarquand, Rachel L. Morgan, Keith N. H. Parry, Anne E. Picksley, Odilon P. D. Silva, Sharon Van Deusen Sperling, Mary R. Wallace, Harriet C. Woakes. *Linguistics:* *James M. Hodgson, Noureddine Jalal, Robert Melbourne, Martin H. Prior, Jean M. Scott. *Phonetics:* Kusay A. Ahmad, Colin E. Capell, Susan J. H. Summers. (52)

University Postgraduate Diplomas: Archive Studies 12‡; Fine Art 45; Linguistics 5†

*Awarded Mark of Distinction. †1 Candidate awarded Mark of Distinction.

‡2 Candidates awarded Mark of Distinction.

FACULTY OF ECONOMICS

Ph.D. *Laws:* Stephen F. Condit, Michael A. Talalay. (2)

M.Sc. *Economics:* Kidane M. Asmerom, Julian P. W. Cunningham, Bridget Gander, Stephen James, Nicholaos T. Manolopoulos, Christopher A. Reynolds, *Michael A. Schraer. *International Relations:* Jamie M. Ball, Alexis Heraclides, Hoo Lip Seng, Sanghamitra Lahiri, Jean A. Lufadeju, Strike Mkandla, Nosakhare O. Obaseki, James C. Salfarlie. (15)

*Awarded Mark of Distinction.

FACULTY OF LAWS

LL.D. William E. Butler. (1)

Ph.D. Safia M. Safwat. (1)

LL.M. Ian C. A. Bishop, Marion A. Bolton, Merlin A. Boyce, Pierre-Gerard Champagne, Gregory L. St A. Christie, Stephen G. Corones, Richard L. Day, Dionyssios Divaris, Satyabhooshun G. Domah, Robert B. Donin, Paul D. Edwards, Jonathan J. Forder, Nicholas Frangistas, Danied R. Fung, George Georgakopoulos, Michael P. Georgilas, Keith N. Grant, Quamber Hamid, Timothy A. C. Harris, Janette Haywood, Simon K. Hearn, Godfrey S. Kajungu, Aristides Kalamiotis, Lily Lee Lai Yin, Petrus A. K. le Roux, Terence F. Martin, Alan M. Millhouse, Saleha Mohd Ramly, Peter T. Morrow, Dipakkumar Naik, Eamon F. O'Connell, Parkash Ojala, Cournenay S. Orr, Antonio R. Parra, Trevor O. Patterson, Robert W. Payne, Margaret Penton, Leo D. Pointon, Russell W. Pritchett, James H. P. Ratnayeke, Jane M. Richardson, Margaret M. Rush, Abas B. H. Serudin, Raziabegum H. Sheikh, Amos Shlosberg, *Gavin J. C. Silbert, Justin L. Simon, James S. S. Smyth, *Elizabeth J. Stackpool, Edward J. Sullivan, Michael L. Taylor, Geraldine L. Van Bueren, Richard J. White, Simon D. Williams, Valentine A. F. Willie, Dianna M. Yach, Dimitris Zacharopoulos. (57)

University Postgraduate Diplomas: International Law 6; Shipping Law 12.

*Awarded Mark of Distinction.

FACULTY OF SCIENCE

D.Sc. Peter McMullen, David G. Whittingham. (2)

Ph.D. *Anatomy and Embryology:* Christopher Kennard, Robin H. Lovell-Badge, Ulrich Tröhler. *Anthropology:* Robert J. M. Clarke, Benjamin C. C. Rudder. *Bartlett School of Architecture and Planning:* Meera M. Bapat, Emine F. Eke, Robert A. Fuller, Grace B. Kenny, Elizabeth N. Panayotatos, Mark C. Swenarton, Robert D. G. Webb. *Biochemistry:* David J. Bates, Edna J. Bates, Athanassios Haritos, Andrew N. Lane, Kathryn J. H. Robson, Samararatna Subasinghe, Kathleen White, Russell Williamson. *Botany and Microbiology:* Patricia C. Anderson, Edward S. Diala, Mumtaz Jehan, David P. Josey, James J. Pritchard, Elizabeth Sheffield. *Chemistry:* Joao F. A. Ferreira, Andrew J. Garman, Andreas S. Georgiou, Roy Gosling, Raymond Harvey, Roger James, Olgierd R. Lalko, John P. Normington, Patricia B. Porter, Ian P. Rothwell,

Bin D. Sidek, Jerzy A. Synowiec. *Geography:* Alasdair McM. Blair, Mary E. Cawley, Christopher P. Cooper, Alan B. Fishwick, Manouchehr Ghorashi, Peter C. Humphreys, John R. Marshall, Peter J. Sollis, Tan Khye Chong. *Geology:* Remzi Akkok, Hayriye F. Alkaya, John F. W. Bowles, Paul G. Edwards, Ramzi H. Haddad, David J. Shipp, Rosanna J. Taylor. *History and Philosophy of Science:* Bhaskar C. Chakravarti, Jon V. Pepper. *Human Genetics and Biometry:* Graham Casey, Karen P. Steel. *Mathematics:* Kahtan H. J. Al-Zubaidy, Richard H. K. Thomas. *Pharmacology:* Miriam Angeli-Greaves, Maurice B. Hallett, Philip E. Harrison-Read, Adrian N. Payne, Ailsa J. Shores, Timothy J. Williams. *Physics and Astronomy:* Richard H. Bell, Richard A. W. Bradford, Martin A. Crees, Michael J. Harris, Sheila Kooijman, Gregory E. Parkes, Furkan A. I. Ramzan, Paul A. Roberts, Manoel R. Robilotta, Keith Shortridge, Peter M. Spenser, Keith T. Strong, Alexander W. Wishart. *Physiology:* Michael A. Ferenczi, Maria Fitzgerald, Giovanni E. Mann. *Psychology:* Roger J. Sapsford, Andrew P. Smith, Margaret J. Snowling, Beryl S. Starr, Rosemary J. Stevenson, Deborah J. Taylor. *Statistics and Computer Science:* Femi B. Agbalajobi, Sinan Yilmaz. *Zoology and Comparative Anatomy:* Christine E. Clayton, Jane E. Galton, Mark C. P. Marsh, Karol J. Mierzejewski, Richard N. Rowland. (95)

M.Phil. *Botany and Microbiology:* Iqbal Ahmed. *Chemistry:* Ana M. C. F. D. M. Cardoso. *Geography:* Linda E. Sutherland. *Physiology:* Marilyn Lord. *Statistics and Computer Science:* John L. Verrall. (5)

M.Sc. *Architecture:* Athanase Anagnou, David V. Asirvatham, Martin D. G. Barnes, Donal B. Boyle, *Frank E. Brown, Eleni Donta, Graeme Geddes, Mohammad R. Hooshangi, George K. Karayanni, Vasiliki Karkavela, Patrick O. Larkin, John J. McAvoy, Regina M. P. Meyer, Aydin R. Mustafa, Peter D. Nardini, Bernard Nemes, Sotiris E. Notaris, Iordanis Pavlidis, Juliana Pefaur, Graham M. Phillips, Stephen G. Robjant, David K. G. Rutter, Michael L. Shoul, Eric Simpson, Joseph Solomon, Wesley A. Spees, Roger F. Thompson, Neil D. Thomson, David R. Woolven. *Biochemistry:* Dimitra Alexakis-Koniallis, Andrew Finley, Christopher J. Flann, Martin F. Furness-Smith, Christopher Konialis, *Rhaiza D. C. Maingon De Freund, Justin N. Mbanya, Mayuriben N. Patel, David J. Robbins, Neelam Sharma, Ann D. Thomson, Paul A. Whittaker. *Computer Science:* Hovnan Avediki Mnasghanians, James R. Brown, Edmond Y. M. Chiu, Choo Qui Nam, Quoc L. D. Dang, Ho Ping Wing, Ian R. Hunt, *Martin W. Stoate, To Woon Ying, Jonathan B. Turetsky, *Peter F. Tye. *Conservation:* William M. Adams, Christine Bradley, David J. Fleming, John K. Irons, Mark G. July, Alison M. Phillips, Nicholas J. Pinder, Charles D. Pye-Smith, Christopher I. Rose, Moira A. G. Warland. *Educational Psychology:* Melanie P. Archer, Daphne J. Argent, Michele L. Hitchcock, John Keever, Ching Yee W. P. Lau Tang, Ingrid C. Lunt, Linda M. North, Robert Spalding, Mary F. Watkinson, Pauline Woolsey. *History and Philosophy of Science:* Azizan Baharuddin, Syad N. Haq, James G. O'Brien, Lawrence D. Pederson, David J. Smith, Michael J. Wilmott. *Hydrogeology:* Julius A. Akande, Joseph U. Akpabio, Morteza Fayazi, Nicola M. Gibb, Sarah J. Glendining, Charles R. C. Jones, John V. Kinsella, Ian S. Warby, John F. W. Watts. *Information Science:* Arja-Riitta O. Haarala. *Marine Earth Science:* *David J. Bishopp, John Elliot, Richard C. A. Elliot, Seyed M. R. Fatemy, Richard F. Jones, Danuta S. McKay. *Micropalaeontology:* David G. Clark, Christopher P. Dewey, Magdy H. Guirgis, Nicholas A. Holmes, Roy M. Irvine. *Physiology:* David J. Willshaw. *Statistics:* David Cohen, Jayesh J. Doshi, Christopher D. Gibbons, Dora C. Michaelides, Praveen M. Nagawa, Wu Wen Chee. (106)

University Postgraduate Diplomas: Social Anthropology 5.

*Awarded Mark of Distinction.

FACULTY OF ENGINEERING

Ph.D. *Chemical and Biochemical Engineering:* Juan A. Assenjo. *Civil and Municipal Engineering:* Hishan M. Al-Hassani, Thomas H. Bennett, Ronaldo Carvalho Batista, Luis A. Godoy, Demetrios Hadjieuthymiou, Khaw Keng Hong. *Electronic and Electrical Engineering:* John Austin, Simon D. Bennett, Anthony K. Booer, Antonio M. P. P. Leite, Paul A. Trudgett, Christopher R. Ward. *Mechanical Engineering:* Farid A. Bassili Gerges, Tam Kwong Yuen. *Photogrammetry and Surveying:* Adel A. Y. Haggag. (16)

M.Phil. *Electronic and Electrical Engineering:* Eiji Sugimoto. (1)

M.Sc. *Biochemical Engineering:* Isaac A. B. Akinghbade, David B. Chaikin, David M. Comberbach, Khow Ju Huat, Kingsley Ofosu-Asiedu, Samir J. Sami, Barbara J. Tupper. *Microwaves and Modern Optics:* Mohammad Arshad, Zohreh Bahrami, David J. Barrett, Graham Benjamin, Philip P. Groves, Balbir S. Johal, Bahman Kiazand, Fabrizio Lombardi, Robin J. Miller, George Papaioannou, Hossein Radnoush, Hussam A. S. A. Sa'ad Aldin, Nicholas W. Towers, *Colin J. Watson, Kyprianos Yianni. *Ocean Engineering (Mechanical Engineering):* Geoffrey A. Boyd, Peter G. King, Aik B. Lua, *Kaim F. Ng, Russell C. Ross, Alexander I. L. Spencer, *Michael W. Whiteside, *John F. W. Zietsman. *Ocean Engineering (Naval Architecture):* Carlos A. L. d'Conceicao, Keith R. H. Ebden, Khawaja A. Hamid, Raymond D. Harper, *Eivind C. Hauger Johannessen, Anthony R. H. Jones, *Andrew M. Kendrick, Julian D. Kenney, Howard L. Mathers, John D. Morris, Marcelo d. A. S. Neves, Simon C. Rusling, Lall S. Sachdev, Rajukutty Sebastian, Byrall Smith, Ceraint H. Swann-Price, Philip V. Thomas, Simon J. Wade, *Ian H. Wakeling, David J. Winstanley. *Photogrammetry:* *Martin Harvey, Martin J. Smith. *Surveying:* John R. G. Harrop, Kristian T. Norris, Ganiyu A. Oyeneye, Richard J. Wylde. (56)

*Awarded Mark of Distinction.

FACULTY OF MEDICINE

Ph.D. *Zoology and Comparative Anatomy:* Diane V. De Cicco, Jean Langhorne. (2)

APPENDIX IV

COLLEGE DIPLOMA AND CERTIFICATE AWARDS 1 OCTOBER 1978 – 30 SEPTEMBER 1979

FACULTY OF ARTS

Certificate in Archive Administration: Emmanuella Uju Onwubuya. (1)

Diploma in Film Studies: Joan Karen Copjec, Leslie James Hyde, Mark Zygmunt Pytel. (3)

Diploma in Library and Information Studies: Susan Pauline Adler, Timothy Ogunlana Ajayi, Lorraine Allan, Helen Staveley Ash, Peter Robert Auber, Gillian Helen Elisabeth Ayers, Susan Jane Bament, Peter Crawford Bennett, Susan Jane Brammer, Angela Margaret Bridges, Sarah Ann Clare, Alan John Currie, Katherine Ann Dale, Ruth Gwenllian Davies, Alison Mary Draffin, Patricia Jane Evans, Barbara Grace Stella Hickford, Kay Garden Holman, Catherine Lynne Jury, Athanase Buhura Rwandekwe Kanamugine, Katherine Kibbee, Christopher Leach, Clare Valerie Lintel, John McPherson Montgomery, Caroline Amanda Moore, *Ruth Karen Moore, Susan Mavis Pargeter, Susan Elizabeth Parker, Christopher Phillips, Howard Vaughan Pierce, Joanna Hazel Ramsey, Caroline Jane Silverwood, Sarah Jane Smith, Robin Anthony Blackstone Steedman, Andrew John Robert Taylor, Lewis Alan Rhys Thomas, Richard Michael Thompson, Janet Thorner, Janet Charrosin Waddams, Alexander Philip Warnock, Julia Louise Willcock, Jennifer Anne Wybourne. (42)

Certificate of Proficiency in Phonetics: Djamila Allel, Olivio Argenti, Caroline Mary Atkinson, Eunate Belausteguigoitia, Yolande Lydia Bernard, Harriet Emma Berry, Celia Joan Bishop, Colin Edward Capell, Sean Stephen Carey, Sian Elizabeth Carr, Isabel Diez, Jennifer Joan Edgar, Yolanta Galusiewicz, Ramon Garcia, Beverley Frances Gilbert, Barbara Susanne Graf, Thomas Guthrie Hall, Mayumi Hazama, Francoise Joyon, Yumi Kakita, Robert Lagadec, Amanda Jane Lister, Jasna Lukic, Monique Virginie Mathieu, Margaret Miller, John Ellis Palfrey, James Patrick Scanlan, Julie Anne Sibbald, Wolfgang Spath, Janig Stephens, Leoni Gilda Harvja Suarez, Marcia Ignez Do Carmo Tilio, Morena Tolaini, Yoshimasa Tsukuma, Aileen Beryl Tulloch, Carmella Mary White, Elizabeth Willan, Mary Josephine Wilson. (38)

*Awarded with distinction.

FACULTY OF SCIENCE

Diploma in Conservation: William Mark Adams, Christine Bradley, David John Fleming, John Kennedy Irons, Mark Georges July, Alison Marjorie Phillips, Nicholas John Pinder, Charles Durran Pye-Smith, Christopher Durran Rose, Moira Alexandra Graeme Warland. (10)

Diploma in Hydrogeology: Julius Adebola Akande, Joseph Udom Akpabio, Nicola Marie Gibb, Sarah Jane Glendining, Charles Richard Chappell Jones, Esmail Khazai, John Victor Kinsella, Ian Stuart Warby, John Frederick Watson Watts. (9)

Diploma in Micropalaeontology: David Glynne Clark, Christopher Paul Dewey, Magdy Halim Guirguis, †Robert Henry Hargreaves, Nicholas Adam Holmes, Roy Mackintosh Irvine. (6)

Diploma in Statistics: Chuang Min Hwei, Thomas Kurian. (2)

†Awarded posthumously

FACULTY OF ENGINEERING

Diploma in Biochemical Engineering: Isaac Adeniran Bolanle Akingbade, David Benjamin Chaikin, David Martin Comberbach, Khow Ju Huat, Kingsley Ofosu-Asiedu, Barbara Joan Tupper. (6)

Diploma in Chemical Engineering: Douglas John Broughton, *Mark Edward Crowther, Victor Jose Falcon Borges, Charles Robert James, *Con Kalimeris, Alistair Campbell Mackay, Mark Christopher Watts. (7)

Diploma in Microwave Engineering; Zohreh Bahrami, David John Barrett, Graham Benjamin, Philip Peter Groves, Don Asoka Ranjan Jayasuriya, Balbir Singh Johal, Bahman Kaizand, Fabrizio Lombardi, Robin James Miller, George Papaioannou, Hossein Radnoush, Hussam Aldin Shams Aldin Sa'ad Aldin, Nicholas William Towers, *Colin James Watson, Kyprianos Yianni. (15)

Diploma in Ocean Engineering: Geoffrey Alan Boyd, Carlos Antonio Levi da Conceicao, Keith Robert Henwood Ebden, Khawaja Abdul Hamid, Raymond David Harper, *Eivind Colin Hauger Johannessen, Anthony Raymond Hugh Jones, *Andrew Martin Kendrick, Julian David Kenney, Peter George King, Aik Beng Lua, Howard Leslie Mathers, John David Morris, Marcelo de Almeida Santos Neves, *Kaim Fui Ng, Russell Charles Ross, Simon Christopher Rusling, Lall Singh Sachdev, Rajukutty Sebastian, Byrall Smith, Alexander Iain Lawson Spencer, Geraint Huew Swann-Price, Philip Vaughan Thomas, Simon Jonathan Wade, *Ian Hugh Wakeling, *Michael William Whiteside, David John Winstanley, *John Frederick Wallace Zietsman. (28)

Diploma in Photogrammetry: Erle Keith Vincent Anderson, *Silburn St Aubyn Clarke, Jonathan Greig Forbes, Timothy Charles Jackson, Manoj Raichand Shah. (5)

Diploma in Surveying: *Nigel Atkinson, Jeffrey Auty, Bruce Donald Beadle, Peter Donald Cridland, Mohamed Safwat Mohamed El Hasseny, Andrew Paul Gonzalez, Elaine O'Neill Kimberley, Lee Kam Fatt, David John Lillicrap, Zarrin Taj Saadat, Christopher John Sage. (11)

*Awarded with distinction

FACULTY OF ENVIORNMENTAL STUDIES

Diploma in Design and Planning Education: Osvelia P. Barrera De Basurto, Eduardo Basurto Salazar. (2)

Diploma in Development Planning: Nader Afshar, Shahnaz Amiri-Talesh, Sara Maria Teresa Rossi. (3)

APPENDIX V

SCHOLARSHIPS, STUDENTSHIPS AND PRIZES
COLLEGE AND UNIVERSITY AWARDS

COLLEGE AWARDS

Charlotte Ashby Prize (Laws)—J. N. Clark.
Barlow Prize (Electronic and Electrical Engineering)—S. D. Bennett.
Herbert Batsford Prize (Architecture)—R. M. Mull.
Bayliss-Starling Memorial Scholarship (Physiology)—Susan F. Gottlieb.
Francis Perch Bedford Prize (Zoology)—A. M. Davies.
Boise Scholarships (Fine Art)—Margaret Chandler, Susan Derges, A. Gormley, Carole Hammond, N. Hamper, N. J. Hilton, J. S. Miller, Suzanna O'Driscoll, W. Packer, V. Parsons, Cherry Pickles, S. Pierse, B. Pulsford, M. Roberts, Annie Ross, Deborah Watson.
Bonney Prize (Geology)—P. J. Maddigan.
R. E. Bradbury Memorial Prize (Anthropology)—G. H. Stanton.
Broderick-Parry Prize (Geography)—Janina Brzeskwinski.
Margaret Browne Studentship (Zoology)—J. M. Hollands.
Rodney Burn Prize (Fine Art)—Celia Paul.
Antonio Cippico Medal and Prize (Italian)—Carmela White.
Lillian Clarke Prize (Botany and Microbiology)—Carol F. A. Hope.
Clinton Prize (Electronic and Electrical Engineering)—D. A. Shepherd.
Dawes Hicks Postgraduate Scholarship (Philosophy)—Z. M. Trachtenberg.
Donaldson Medal (Architecture)—M. J. V. Salt.
Early English Text Society's Prize—Rachel Wright.
Elliot-Blake Studentships—M. C. Croucher, G. Gergely, Freda Rossouw, T. M. Asonganyi.
Environmental Design Prize—B. R. Harwood, P. Keetley, prize equally divided.
Fielden Research Scholarship (German)—M. J. Hammersley.
Richard Fitzgerald Prize (Laws)—Elizabeth C. Walters.
Sir Banister Fletcher Prize and Medal (Architecture)—Alexandra E. Freemantle.
Flinders Petrie Scholarships in Egyptian Archaeology—Lisa L. Giddy, C. N. Reeves.
Daryll Forde Award (Anthropology)—Penny E. Jenden.
Edith Goodyear Prize (Geology)—J. L. John.
Eleanor Grove Scholarships for Senior Women Students (German)—Angela Schweitzer, Alison Cooper.
Eva Grunwald Memorial Prize (French)—M. Kingsford.
Paul Haas Studentship (Botany and Microbiology)—Freda Rossouw.
Paul Haas Studentship (Biochemistry)—R. Nudd.
Violet Hall Prize (French)—Jennifer Edgar, Sian E. Carr, prize equally divided.
Hart Prize (Photogrammetry)—S. St A. Clarke.
Hart Prize (Surveying)—N. Atkinson.
Archibald P. Head Memorial Medal and Prize (Mechanical Engineering)—I. C. Kokkinos.
Heimann Medal (German)—A. Bauer Mussell.
Elsie Hitchcock Prize (English)—A. Clemit.
John Oliver Hobbes Memorial Scholarship in Modern English Literature—F. A. Ashfield.
Holford Travelling Scholarships (Planning and Civic Design)—M. England, Stephanie Yabsley.

Hotine Exhibition (Photogrammetry and Surveying)—M. R. Shah.
R. B. Hounsfield Prize in Traffic Engineering—Lai Poi Kee.
Joseph Hume Scholarship in Law—B. K. Winetrobe.
*Huntingdon Research Centre Prize (Histology Part I – Medical Sciences)*I. Smith.
Hurst Prize in English Law—Stella Outen.
Institution of Civil Engineers Prize—A. M. Icannides.
Institution of Electrical Engineers Prize—M. J. Hay.
Institution of Mechanical Engineers Prize—J. B. D. Rush.
*Jackson Lewis Scholarships*J. J. V. Bryant, Jennifer S. Parrott, Maria Vassiliadou.
Sir Hilary Jenkinson Scholarship in Archive Studies—Patricia Methven.
Jolowicz Prize (Roman Law)—L. N. Mann.
Ker Memorial Prize (English)—Lisa Baxter.
Kitson Prize (Chemical and Biochemical Engineering)—P. Bradley.
Dr R. Kohn Prize (Physiology Part I – Medical Sciences)—Dawn M. Viveash.
Library and Information Studies Exhibition—Ruth Goldstein, R. Heseltine.
Betty Malcolm Scholarship (Fine Art)—I. d'Oliveiro.
Maxwell Law Prize—Nicola M. Lacey.
Merck Sharp and Dohme Limited Prize (Biochemistry Part I – Medical Sciences)—Dawn M. Viveash.
Merck Sharp and Dohme Limited Prize (Genetics Part II – Medical Sciences)—Susan C. Minnis.
Sir William Meyer Essay Prize (Geography)—C. Titcombe.
Sir William Meyer Prize (Geography)—N. K. Warren, Heather Pluck, equally divided.
Sir William Meyer Travelling Studentships (History)—D. M. Bateson, E. J. M. Campbell, E. H. H. Green, Katharine J. Hudson, Caroline P. Jackson, M. C. Johnson, A. Lee, A. Karen Liebreich, P. J. Morris, Wendy J. Newell, Janet E. Robson.
John Stuart Mill Scholarship in Philosophy of Mind and Logic—Z. M. Trachtenberg.
Momber Scholarship in Science—A. P. Boyle.
Cecily de Monchaux Memorial Prizes (Psychology)—Ewa Zarkowska, Elizabeth Powell.
Rosa Morison Postgraduate Scholarship in Arts—M. A. Cheetham.
Morley Medal (Modern English Literature)—J. Thompson.
Douglas Murray Scholarship in Egyptology—C. N. Reeves.
Melvill Nettleship Prize for Figure Composition (Fine Art)—S. Pierse.
Owings Travelling Scholarship (Environmental Studies)—Janet Y. Abrams.
Perren Studentship (Astronomy)—S. J. Kellock.
Platt Prizes (Greek)—J. Greenberger, Josephine Balmer.
Harry Poole Prize (Chemistry)—R. Bourne.
Postgate Prize (Classical Philology)—J. Priest.
Ramsay Memorial Medal (Chemistry)—Z. Kisiel.
Mary Rischgitz Prize (Fine Art)—Cherry Pickles.
Graham Robertson Travelling Scholarships (Fine Art)—Christine Hatt.
Robert Ross Scholarship in Fine Art—J. Scott Miller.
Slade Prizes—Judith Rugg, Liz Flowerday.
Smith Kline and French Laboratories Limited Prize (Medical Sciences)—A. V. Wright.
Steer Medal and Prize (Fine Art)—Linda Hughes.
Stevenson Prize (Applied Mathematics)—T. C. Price.
C. A. R. Taylor Prize (Physics and Astronomy)—S. J. Sudell.
Sir Andrew Taylor Prize in Architecture—G. J. MacLaren.
Sir Andrew Taylor Prize in Fine Art—A. Gill.
Henry Tonks Prize (Fine Art)—N. Maish.
Troughton Scholarship—R. B. Gathercole.

Tuffnell Scholarships (Chemistry)—Yau-Tai Lam, K. G. Bilyard.
L. F. Vernon-Harcourt Prize (Civil Engineering)—Chan Cheow Bin.
Viking Society Prize—I. McDougall, D. McDougall.
Ellen Watson Memorial Scholarship in Applied Mathematics—Mariette C. Davies, A. T. Burke, prize equally divided.
Webber Prize (Laws)—Gillian S. Bundred, P. E. P. Tron, prize equally divided.
Dr D. T. Whittet Prize (Pharmacology Part II – Medical Sciences)—L. Loizou.
Audrey Wykeham Prize (Fine Art)—Mellissa Scott Miller.

FACULTY MEDALS AND PRIZES

Engineering: Goldsmid Medal and Prize—P. A. Oliver.
Environmental Studies: Medal and Prize—N. A. Lee-Evans.
Laws: Andrews Medal and Prize—Nicola M. Lacey.
Medical Sciences: Medal and Prize—N. R. Ruggins.

SESSIONAL PRIZES

Anthropology: Kaberry Prize—Isabella K. Shanks, Joanna J. Verrall. *M. G. Smith Prize*—Helen King.
English: Campbell Clarke Scholarships—(1) M. McDowell, (2) J. Tucker. *West Scholarship*—Helen C. Teltsher.
Fine Art: Coldstream Prize—E. Crowther. *Monnington Prize*—C. Moock.
French: Rosa Morison Prizes—(1) Katherine R. Attwood, (2) Janine D. Currey, (3) Jill Taylor.
Geography: College Prize—C. C. Hand. *H. C. Darby Prize*—Jill L. Jones. *Maconochie Prize*—Anne E. Green. *1903 Prize*—A. C. Day, R. M. Legg, prize equally divided.
German: Robertson Prize—Susan Johnson. *Willoughby Prize*—Rosemary Harrison.
Greek: Long Prize—Anna Cohen.
History of Art: Gombrich Prize—Susan Ashworth. *Whittkower Prize*—J. Bryant.
Italian: Sir Anthony Panizzi Prize—Annamaria Cooper, Ceri Thomas, prize equally divided.
Latin: Key Prize—Georgina Robinson.
Philosophy: Dawes Hicks Scholarships—(1) Adrienne P. Pyne, Dorothy Stein, prize equally divided. (2) Mary Glynn.
Phonetics and Linguistics: Harold E. Palmer Prize—Susan Corrigan.
Political Economy: Hume-Lloyd Scholarships—(1) Juat J. Han, (2) C. A. Hopkins, (3) A. I. A. Ikkes, Andrailla S. Economides, A. C. Saul, prize equally divided.
Scandinavian Studies: Rosa Morison Prize—S. Walton. *Crabtree Prize*—D. I. Spade.
Spanish and Latin American Studies: Alcala Galiano Prize—D. Prescott.
Laws: Andrews Prizes—(1) M. R. Lacey, (2) Jennifer M. Marr, (3) A. K. Walkling, (4) G. B. Catford, (5) K. J. Prosser.
Architecture: Bartlett Prizes—(1) G. C. Comely, (2) P. R. St John, (3) D. L. Green.
Biochemistry: Jack Drummond Prize—Kim Rush. *Plimmer Prize*—Lesley Pantlin.
Botany and Microbiology: Darwin Prize—Karen J. Hopkins. *Robert Hooke Prize*—N. A. Zuckerman.
Chemistry: C. K. Ingold Prizes—(1) I. Robins, (2) M. L. Wolf, (3) G. V. Lewis.
Geology: Chubb Prize—A. R. Driscole. *Hollingworth Prize* –
Mathematics: Filon Prize—A. C. Hayes, D. R. Hargrave, prize equally divided. *Hill Prize*—D. J. Ives, R. H. Warne, prize equally divided. *Jeffery Prize*—S. C. Charlwood.

Pharmacology: H. O. Schild Prize—Rachel Coates.
Physics and Astronomy: William Bragg Prize—M. S. Wardell. *Oliver Lodge Prize*—P. A. L. Bishop. *Wood Prize*—D. Waxman. *Huggins Prize*—C. R. Pigg.
Physiology: Foster Prize—C. Prior. *Sanderson Prize*—A. Plane.
Psychology: Burt Prize—Julie Marsh. *McDougall Prize*—Laura Goldstein. *Spearman Prize*—M. Gainsborough.
Statistics and Computer Science: Egon Pearson Prize—P. A. Tabor. *Karl Pearson Prize*—Julie Robinson.
Zoology: Zoology Prizes—(1) Lynn M. Kemp, (2) Janice Allan.
Chemical and Biochemical Engineering: Goldsmid Prizes—(1) E. D. A. Obeng, (2) R. R. Solanki.
Civil and Municipal Engineering: Goldsmid Prizes—(1) A. F. Leung, (2) N. R. Patel, (3) F. J. Valero.
Electronic and Electrical Engineering: Goldsmid Prizes—(1) N. J. Burton, (2) I. J. Cox, (3) N. Karavassilis.
Mechanical Engineering: Goldsmid Prizes—(1) H. Iacovides, (2) Yeung Ching King.
Medical Courses — Part I Examination: Drummond Prize in Biochemistry—A. D. Gordon-Brown. *Glaxo Prize for Best Aggregate Performance in Part I*—Dawn M. Viveash. *I.C.I. Prize in Anatomy*—Diana R. Holdright. *I.C.I. Prize in Physiology*—Martha L. Graber.
Medical Courses — Part II Examination: Cluff Prize in Physiology—S. P. Ball. *Cuxson Gerrard Prize in Pharmacology*—Jennifer A. Du Toit. *Drummond Prize in Biochemistry*—Mary H. Austin. *Elga Prizes in General Pathology*—(1) Jennifer A. Du Toit, (2) Deborah A. Fairweather. *Suckling Prize in Neurosciences and Behavioural Sciences*—J. P. Joseph. *Wellcome Prize in Human Biology*—Susan C. Minnis. *Wyeth Prize for Best Aggregate Performance in Part II*—Susan C. Minnis.
Second Examination in Dental Surgery: Anatomy Prize—L. A. W. Hunt, P. J. Small, prize equally divided. *Physiology Prize*—Vivien M. Kennedy.

UNIVERSITY POSTGRADUATE AWARDS

Chemistry: P. Christou (1st year). *Civil Engineering:* R. Poon San Wong (1st year). *English:* R. J. Weis (1st year). *Philosophy:* R. Upton (2nd year). *Zoology:* J. Hollands (3rd year).

APPENDIX VI

BENEFACTIONS, DONATIONS, RESEARCH GRANTS AND CONTRACTS

The Council makes grateful acknowledgement of the following:

ANGLO-AUSTRIAN OBSERVATORY

£1,747 for the Department of Physics and Astronomy for the construction of an external memory of the Image Photon Counting System.

ANONYMOUS DONOR

£1,000 for the Department of Hebrew and Jewish Studies in support of a course of lectures on 'Spanish Jewish history in the 15th Century and Emancipation of the Jews in Europe 1789-1917'.

AUDITS OF GREAT BRITAIN LIMITED

£2,000 for the Department of Electronic and Electrical Engineering for the construction of a prototype Personnel Identity Transponder/Receiver System.

THE BRITISH ACADEMY

(1) £230 for the Department of German for the study of the Liverpool Library 1758-1800.

(2) £26,273 and £2,835 for the Department of Greek for work on unpublished Oxyrhyncus Papyri.

(3) £535 for the Department of History for a study of popular preaching in the Middle Ages.

BRITISH DIABETIC ASSOCIATION

£658 for the Department of Biochemistry for research on hormonal regulation of triglyceride synthesis in adipose tissue.

THE BRITISH LIBRARY

(1) £6,300 for the School of Library, Archive and Information Studies for a workshop on Basic Information Research.

(2) £44,700 and £13,450 for the Department of Statistics and Computer Science for a study of facsimile techniques in integrated computer communications systems.

(3) £3,150 for the Department of Statistics and Computer Science for a study of requirements and implementation of facilities for connecting U.K. Hosts to Euronet.

(4) £200 for the Department of Statistics and Computer Science for travel to the United States to discuss X25 telecommunications activities.

CANCER RESEARCH CAMPAIGN

(1) £9,484 and £288 for the Department of Anatomy and Embryology for the investigation of tissue invasion using embryonic and malignant cell in culture.

(2) £28,507 for the Department of Biochemistry for a study of the effects of Aflatoxins.

(3) £1,003 and £553 for the Department of Biochemistry for the development of a test system for carcinogens and research on biosynthesis and induction of Cytochrome P450 in rat liver.

(4) £7,206 and £384 for the Department of Botany and Microbiology for research on nucleic acid metabolism in mitochondria.

(5) £218 for the Department of Genetics and Biometry for studies of chromosomes and cell genetics in colon polyps.

MISS MARY MAUD CLINTON (THE LATE)

A bequest of £16,001 to be used for College purposes.

MR W.V. CLUFF

£700 as an addition to the capital fund for the support of the Cluff Prize in Physiology.

MICHAEL COX ELECTRONICS

£2,000 in support of a post in the Department of Electronic and Electrical Engineering.

DANISH MINISTRY OF EDUCATION

£150 for the Department of Scandinavian Studies for the Nordic Visiting Professors Scheme.

DEPARTMENT OF THE ENVIRONMENT

(1) £42,019 for the Bartlett School of Architecture and Planning for a study of policies for labour market adjustment.

(2) £40,698 for the Bartlett School of Architecture and Planning for a study of employers in connection with mobility among construction operatives.

(3) £25,015 for the Bartlett School of Architecture and Planning for the study of decision making related to small rural communities.

(4) £24,773 for the Bartlett School of Architecture and Planning for the study of the role of sub-contractors in housebuilding capacity.

(5) £18,026 for the Bartlett School of Architecture and Planning for the study of capacity and response to demand of the private housebuilding industry.

(6) £6,259 for the Bartlett School of Architecture and Planning for a construction industry labour force data bank survey.

(7) £4,728 for the Bartlett School of Architecture and Planning for the study of the mechanism of supply of materials to building constructors.

(8) £3,500 for the Bartlett School of Architecture and Planning for the study of market behaviour and substitution of outputs by construction firms.

(9) £3,206 for the Bartlett School of Architecture and Planning for the study of the costs of employment inaccessibility.

(10) £66,888 for the Department of Civil and Municipal Engineering for the monitoring of arterial road safety in Swindon.

(11) £46,717 for the Department of Civil and Municipal Engineering for the study of the safety of medium sized goods vehicles.

(12) £42,000 for the Department of Civil and Municipal Engineering for the study of the suspension of solids under the action of waves and currents.

(13) £6,758 for the Department of Civil and Municipal Engineering for the production of a manual on road safety.

(14) £1,416 for the Department of Civil and Municipal Engineering for the identification of patterns of structural failure in buildings.

(15) £8,491 for the Department of Geography for the production of a model to predict ice formation on roads.

(16) £982 and £379 for the Department of Geography for the study of the impact of office development on the inner city.

DEPARTMENT OF HEALTH AND SOCIAL SECURITY

(1) £13,033 for the Department of Mechanical Engineering for the development of an above knee prosthesis with voluntary control of knee function.

(2) £9,359 for the Department of Mechanical Engineering for the alignment of lower limb prostheses.

(3) £1,970 for the Department of Mechanical Engineering for the updating of vacuum forming control.

(4) £1,722 for the Department of Mechanical Engineering for the study of problems arising from abnormal weight-bearing.

DEPARTMENT OF TRANSPORT

(1) £3,220 for the Department of Civil and Municipal Engineering for small scale multi-bay stiffened panel tests.

(2) £31,000 for the Department of Statistics and Computer Science for a route selection project.

DIAMOND RESEARCH COMMITTEE

£1,500 for the Department of Geology for diamond research.

EUROPEAN SPACE AGENCY

£5,376 for the Department of Physics and Astronomy for the expenses of collaboration in the EXOSAT experiment development programme.

GASSIOT COMMITTEE OF THE ROYAL SOCIETY

£2,776 for the Department of Physics and Astronomy for research on the scattering of electrons by atomic oxygen.

HAWKER SIDDELEY D. E. LIMITED

£800 for the Department of Electronic and Electrical Engineering for a Mini Transponder System.

HEALTH AND SAFETY EXECUTIVE

£5,081, £650 and £116 for the Department of Genetics and Biometry for the study of genetic abnormalities induced by asbestos and other dusts.

THE HOLFORD MEMORIAL TRUST

£8,000 over five years for the establishment of the Holford Travelling Scholarship. The Scholarship is awarded annually for the most outstanding work produced by a postgraduate planning student of University College London, and to enable the student to travel in order to undertake further studies in the fields of planning and civic design.

IMPERIAL CHEMICAL INDUSTRIES

£7,416 for the Department of Biochemistry for the study of the degranulation of endoplasmic reticulum as a short term carcinogenicity test.

INTERMEDIATE TECHNOLOGY DEVELOPMENT GROUP LIMITED

£17,686 for the Department of Chemical and Biochemical Engineering for the preparation of a catalogue, etc., of small-scale pharmaceutical equipment.

LADY ELEANOR MAY JAMES (THE LATE)

A bequest of £2,162 to be used for College purposes.

DR PHYLLIS KABERRY (THE LATE)

A bequest of £1,000 for the Department of Anthropology for investment or capital use. [Dr Kaberry was a Member of Staff, Department of Anthropology, 1949-77; Reader in Anthropology, 1951-77.]

LEUKAEMIA RESEARCH FUND

£1,079 for the Department of Zoology and Comparative Anatomy for research on C-type virus proteins.

LEUKAEMIA SOCIETY OF AMERICA

(1) $ 31,000 for the Department of Zoology and Comparative Anatomy for a Fellowship Award.

(2) $ 2,000 for the Department of Zoology and Comparative Anatomy for Research Fellowship institutional costs.

THE LEVERHULME TRUST FUND

£5,000 for the Departments of History and English Language and Literature for the preparation of a new edition of the Domesday Book.

LOCKHEED MISSILES AND SPACE COMPANY INCORPORATED

$ 35,000 for the Department of Physics and Astronomy for the development of a software package in connection with the XRP Experiment.

THE MARCONI COMPANY LIMITED

£4,500 for the Department of Electronic and Electrical Engineering for research on active phased array elements.

MAX PLANCK INSTITUTE

$ 2,500 for the Department of Biochemistry for the computer analysis of spatial diffusion systems.

McMICHAEL LIMITED

£10,357 for the Department of Electronic and Electrical Engineering for a design study for a shipboard satellite terminal.

MEDICAL RESEARCH COUNCIL

(1) £32,246 and £631 for the Department of Anatomy and Embryology for the study of mechanisms involved in the development of motor units.

(2) £20,818 for the Department of Anatomy and Embryology for studies of membranes of smooth muscle cells.

(3) £7,790 for the Department of Anatomy and Embryology for research on the role of adenine nucleotides and nucleosides in skin inflammation.

(4) £19,021 for the Department of Anatomy and Embryology for research on neurotransmission to genito-urinary smooth muscle.

(5) £1,078 for the Department of Anatomy and Embryology for the study of mechanisms controlling the formation of neuromuscular connections.

(6) £21,956 and £402 for the Department of Biochemistry for studies of cell cycle in Saccharomyces Cerevisiae.

(7) £12,109 for the Department of Biochemistry for the study of the identity of derivatives involved in sequestration of adenine nucleotides in rat heart.

(8) £340,046 and £176 for the Department of Biophysics for research on mechanisms of the synaptic function.

(9) £27,895 for the Department of Electronic and Electrical Engineering for tissue characterisation using acoustic microscopy.

(10) £15,121 for the Department of Genetics and Biometry for the study of genetic linkage.

(11) £14,072 for the Department of Genetics and Biometry for studies of gonads in male-sterile mice with chromosome translocations.

(12) £196,928 for the Department of Pharmacology for the investigation of cholinergic synapses.

(13) £2,275 for the Department of Pharmacology for the characterisation of transmitter receptor sites in isolated brain synaptic membranes and junctions.

(14) £103 for the Department of Phonetics and Linguistics for the study of the perception and production of speech patterns by normals and the hearing impaired.

(15) £188,332, £26,250 and £8,050 for the Department of Physiology for studies of the mechanism of muscular contraction.

(16) £12,859 for the Department of Physiology for research on the immediate energy supply for muscular contraction.

(17) £4,285 for the Department of Physiology for the calometric study of energy changes during ATP hydrolysis.

(18) £33,094, £6,200, £450 and £134 for the Department of Zoology and Comparative Anatomy for research on the immunology of the nervous system.

(19) £31,463 for the Department of Zoology and Comparative Anatomy for the study of mechanisms in the immunological response of rodents to herpes simplex virus.

MEDICAL RESEARCH COUNCIL, CANADA

$ 2,500 for the Department of Genetics and Biometry in support of a visiting scientist.

MENTAL HEALTH FOUNDATION

£19,065 for the Department of Psychology for the analysis of perceptual motor integration in sub-normal subjects.

THE MIGRAINE TRUST

£2,000 for the Department of Anatomy and Embryology for the study of the distribution of purinergic nerves in the cerebral vasculature.

MINISTRY OF DEFENCE

(1) £3,997 for the Department of Civil and Municipal Engineering for the study of international design formulae for stress analysis of lightweight military structures.

(2) £52,540 for the Department of Electronic and Electrical Engineering for the design of an acousto-optic spectrum analyser.

(3) £29,928 for the Department of Electronic and Electrical Engineering for research on direct optical sensing of acoustic radiation fields.

(4) £13,493 for the Department of Electronic and Electrical Engineering for the study of active phased array techniques.

(5) £13,483 and £321 for the Department of Electronic and Electrical Engineering for the study of direct optical modulation for data highway.

(6) £13,283, £11,744 and £141 for the Department of Electronic and Electrical Engineering for the realisation of microwave circuit functions using acoustic surface waves.

(7) £10,704 for the Department of Electronic and Electrical Engineering for studies of a high resolution array signal radar processing system.

(8) £7,541 and £187 for the Department of Electronic and Electrical Engineering for research on the use of optical fibres to receive and multiplex acoustic signals from sonar transducer arrays.

(9) £4,716 for the Department of Electronic and Electrical Engineering for research on integrated components for optical fibre data highways.

(10) £3,133 and £116 for the Department of Electronic and Electrical Engineering for research on circular arrays for shipborne communications.

(11) £4,020 for the Department of Mechanical Engineering for the study of the control of submersible vehicles in the vertical plane during a high speed turn.

(12) £11,209 for the Department of Phonetics and Linguistics for the study of a segmental approach to speech recognition.

(13) £59,451 for the Department of Statistics and Computer Science for the study of internetworking techniques for packet-switched communications.

MINISTRY OF OVERSEAS DEVELOPMENT

(1) £4,289 for the Bartlett School of Architecture and Planning for the study of evolution of National Urban Policy.

(2) £107,752 and £4,860 for the Department of Geography for the study of public intervention, housing and land-use in Latin American cities.

MORRISON CHARITABLE FOUNDATION

£1,500 for the Department of Anatomy and Embryology for research on pair mechanisms.

THE MULTIPLE SCLEROSIS SOCIETY

£39,006 for the Department of Zoology and Comparative Anatomy for the study of origins and properties of oligodendrocytes.

MUSCULAR DYSTOPHY ASSOCIATION

(1) $ 1,000 for the Department of Anatomy and Embryology for a Fellowship Institutional Allowance.

(2) $ 1,000 for the Department of Physiology for a Fellowship Institutional Allowance.

MUSCULAR DYSTROPHY ASSOCIATION OF CANADA

C$ 1,300 in support of a Fellowship in the Department of Biophysics.

MUSCULAR DYSTROPHY GROUP OF GREAT BRITAIN

(1) £3,860 for the Department of Anatomy and Embryology for research on the influence of electrical stimulation on membrane properties of fast muscles of dystrophic mice.

(2) £831 for the Department of Anatomy and Embryology for research on the development of membrane properties of slow and fast muscles.

(3) £571 for the Department of Anatomy and Embryology for research on nerve muscle connections.

(4) £206 for the Department of Anatomy and Embryology for research on the innervation of slow and fast mammalian skeletal muscle.

(5) £10,609 for the Department of Biophysics for research on satellite muscle cells.

NATIONAL FUND FOR RESEARCH INTO CRIPPLING DISEASES

(1) £559 for the Department of Genetics and Biometry for research on the causes of anencephaly, spina bifida, etc.

(2) £9,610 and £534 for the Department of Zoology and Comparative Anatomy for the study of mechanisms in diseases of the nervous system and muscle.

NATIONAL INSTITUTES OF HEALTH

$ 3,000 for the Department of Zoology and Comparative Anatomy for a Fellowship Institutional Allowance.

NATIONAL RESEARCH DEVELOPMENT CORPORATION

£11,701 for the Department of Electronic and Electrical Engineering for the improvement of a scanning acoustic microscope.

NATURAL ENVIRONMENT RESEARCH COUNCIL

(1) £26,835 for the Department of Geology for research on the influence of cavities and cracks on mechanical properties of rocks.

(2) £705 for the Department of Geology for studies of crustal structure near the Outer Hebrides.

(3) £14,253, £4,637, £1,541 and £521 for the Department of Physics and Astronomy for the study of surface processes and crustal evolution of the terrestial planets.

(4) £10,064 and £300 for the Department of Physics and Astronomy for studies of the Earth's radiation budget.

NORLIN COMMUNICATIONS, U.S.A.

£7,762 for the Department of Physics and Astronomy for services in connection with the CAMEO Experiment.

NORTH ATLANTIC TREATY ORGANISATION

(1) B.Fr. 60,000 for the Department of Chemical and Biochemical Engineering for the study of sources of nuclei in crystallization solution.

(2) B.Fr. 45,000 for the Department of Chemistry for studies of reactions of transition metal cluster compounds involving ligand-bond activation.

THE NUFFIELD FOUNDATION

(1) £3,500 for the Department of Anthropology for the study of the impact of advances of medical science on the Greek Cypriot community in London.

(2) £13,091 for the Department of Political Economy for the study of inter-generational aspects of income distribution.

OVE ARUP AND PARTNERS

£3,000 for the Department of Civil and Municipal Engineering for the hydraulic model testing of flow around platform shafts.

PEARSON LONGMAN LIMITED

£5,000 for the Department of English Language and Literature for the support of the Longman Fellowship.

PURDUE UNIVERSITY

$ 1,500 for the Department of Biophysics for the study of ultrastructure and function of nerve and muscle.

ROCKWELL INTERNATIONAL SCIENCE CENTER

$ 7,000 for the Department of Electronic and Electrical Engineering for the testing of materials.

DR M. J. J. ROWLANDS

£600 for the Department of Anthropology for the general use of the Department. [This sum represents proceeds arising from the sale of books and periodicals left to Dr Rowlands by the late Dr Phyllis Kaberry.]

THE ROYAL NATIONAL INSTITUTE FOR THE DEAF

£2,000 for the Department of Phonetics and Linguistics for a Departmental Research Studentship.

THE ROYAL SOCIETY

(1) £8,000 for the Department of Botany and Microbiology for the study of co-ordination and control of flagellar movement in chlemydomonas.

(2) £2,077 for the Department of Chemistry for ESR studies of transient free radicals.

(3) £600 for the Department of Mathematics for the subsistence of a visiting scientist.

RUTHERFORD LABORATORY

(1) £24,866 for the Department of Physics and Astronomy for the study of elastic scattering at high energies.

(2) £29,471 for the Department of Statistics and Computer Science for the provision of a link for U.K. research workers on ARPANET (1979).

SCIENCE RESEARCH COUNCIL

(1) £21,817 for the Bartlett School of Architecture and Planning for research on the morphology of building complexes.

(2) £19,585 for the Department of Biochemistry for research on amidase genes of pseudomonas aeruginosa.

(3) £34,636 for the Department of Botany and Microbiology for an Advanced Fellowship.

(4) £34,503 for the Department of Botany and Microbiology for the study of spindle formation and the mechanism of mitosis in yeast.

(5) £5,332 for the Department of Botany and Microbiology for the analysis of determinants of disease reaction in plants.

(6) £19,251 for the Department of Chemical and Biochemical Engineering for the study of the effect of fine particles on catalytic conversion in a fluidised bed.

(7) £4,350 for the Department of Chemical and Biochemical Engineering for research on fluid bed granulation.

(8) £89,059 for the Department of Chemistry for the application of high-field NMR spectroscopy to chemical problems.

(9) £45,000 for the Department of Chemistry for mass spectrometry in organic organo-metallic and inorganic chemistry.

(10) £12,550 for the Department of Chemistry for the study of aromatic rings in transition metal clusters.

(11) £12,350 for the Department of Chemistry for the synthesis of large ring conjugated systems.

(12) £12,150 for the Department of Chemistry for ESR studies on matrix-isolated radicals.

(13) £12,150 for the Department of Chemistry for research on polycyclic hydrocarbons.

(14) £12,150 for the Department of Chemistry for studies of isomerisation of transition metal complexes.

(15) £12,150 for the Department of Chemistry for the study of critical solution temperatures and critical exponents for binary liquid mixtures.

(16) £11,950 for the Department of Chemistry for research on critical temperature and pressure and phase equilibria in the critical region for fluid mixtures.

(17) £11,111 for the Department of Chemistry for research on the range of radical cation mechanisms of nitration.

(18) £11,950 for the Department of Chemistry for research on synthons in organic synthesis.

(19) £11,950 for the Department of Chemistry for studies of metallic aminyl-oxyl and aminyl-thiyl radicals.

(20) £11,650 for the Department of Chemistry for studies on non-stoichmetric oxides and minerals.

(21) £11,150 for the Department of Chemistry for the study of theory of chemical reactions and fluorescence in organic solids.

(22) £10,636 for the Department of Chemistry for low temperature spectroscopy on film, disc or matrix-isolated species.

(23) £30,700 for the Department of Civil and Municipal Engineering and the Department of Mechanical Engineering for building adaptations to the London Marine Technology Centre.

(24) £7,925 for the Department of Civil and Municipal Engineering for research on improvements to the control of traffic signals at intersections.

(25) £6,525 for the Department of Civil and Municipal Engineering for traffic signal calculations in relation to junction layout capacity and delay.

(26) £5,100 for the Department of Civil and Municipal Engineering for the study of buckling strength of continuous thin-walled beams.

(27) £32,367 for the Department of Electronic and Electrical Engineering for integrated-optics circuit design.

(28) £8,940 for the Department of Electronic and Electrical Engineering for research on novel techniques in ion exchange fabrication of multimode integrated optical devices.

(29) £7,477 for the Department of Electronic and Electrical Engineering for research on optical control of Impatt Oscillators.

(30) £5,280 for the Department of Electronic and Electrical Engineering for the study of microwave network theory.

(31) £4,000 for the Department of Electronic and Electrical Engineering for the study of industrial robotics.

(32) £5,255 for the Department of Mathematics for a Senior Visiting Fellowship.

(33) £4,984 for the Department of Mathematics for a Senior Visiting Fellowship.

(34) £437,700 for the Department of Physics and Astronomy for geophysical and astronomical research in space.

(35) £215,452 for the Department of Physics and Astronomy for the Bubble Chamber Film Analysis, 1979-82.

(36) £153,581 and £2,000 for the Department of Physics and Astronomy for a balloon programme of infrared astronomy.

(37) £133,654 for the Department of Physics and Astronomy for new computer facilities at Mullard Space Science Laboratory.

(38) £99,377 for the Department of Physics and Astronomy for the development and application of the interactive image processing system.

(39) £39,990 for the Department of Physics and Astronomy for the study of positronium formation cross-section for gases.

(40) £34,636 for the Department of Physics and Astronomy for an Advanced Fellowship.

(41) £29,000 for the Department of Physics and Astronomy for the further development of a liquid helium cooled grating spectrometer system.

(42) £28,980 for the Department of Physics and Astronomy for the computation of atomic data.

(43) £26,511 for the Department of Physics and Astronomy for computing facilities for dynamics explorer data analysis.

(44) £21,000 for the Department of Physics and Astronomy for a scanning table for the Film Analysis Group.

(45) £18,200 for the Department of Physics and Astronomy for research on asymptotic solutions for continuum states of atoms and molecules.

(46) £17,548, £5,600 and £1,649 for the Department of Physics and Astronomy for Film Analysis equipment.

(47) £12,950 for the Department of Physics and Astronomy for ultraviolet astronomy with IUE.

(48) £12,000 for the Department of Physics and Astronomy for the expenses of participation in the IUE Project.

(49) £8,235 and £1,585 for the Department of Physics and Astronomy for observations at AAO.

(50) £11,908 for the Department of Physics and Astronomy for the study of the interactions of hadrons, nuclei and quarks.

(51) £7,629 for the Department of Physics and Astronomy for HLC Extension No.2.

(52) £5,960 for the Department of Physics and Astronomy for observations at Wyoming.

(53) £5,332, £4,502 and £3,438 for the Department of Physics and Astronomy in support of Senior Visiting Fellowships.

(54) £4,877 for the Department of Physics and Astronomy for a workshop on high-level languages for image processing.

(55) £4,600 for the Department of Physics and Astronomy for air conditioning equipment.

(55) £4,225 for the Department of Physics and Astronomy for observations at Wyoming.

(56) £4,000 and £3,760 for the Department of Physics and Astronomy for observations at Tenerife.

(57) £3,054 for the Department of Physics and Astronomy for observations at Palomar.

(58) £2,942 for the Department of Physics and Astronomy for the study of absorption line properties of high redshift QSOs.

(59) £2,054 for the Department of Physics and Astronomy for observations at AAT.

(60) £1,950 for the Department of Physics and Astronomy for guest observer facilities for IUE Project.

(61) £1,807 for the Department of Physics and Astronomy for research on atom-atom scattering.

(62) £1,705 and £720 for the Department of Physics and Astronomy for observations at SAAO.

(63) £1,500 and £100 for the Department of Physics and Astronomy for observations at AAT.

(64) £1,000 for the Department of Physics and Astronomy for optical and infrared investigations of the interstellar medium.

(65) £849 for the Department of Physics and Astronomy for observations and atomic processes for Be and B-like ions.

(66) £692 for the Department of Physics and Astronomy in support of a Senior Visiting Fellow.

(67) £160 and £159 for the Department of Physics and Astronomy for observations at RGO.

(68) Computing facilities for the analysis of astrophysical spectra for the Department of Physics and Astronomy.

(69) Faculities for the computation of atomic data for the Department of Physics and Astronomy.

(70) Computing facilities for thermospheric studies for the Department of Physics and Astronomy.

(71) £16,371 for the Department of Psychology for the study of development of habituation in two species of altricial mammal.

(72) £205,059 for the Department of Statistics and Computer Science for the study of communication of protocols in the context of X25 computer networks.

G. D. SEARLE AND COMPANY LIMITED

£780 for the Department of Chemical and Biochemical Engineering for the isolation and immobilization of certain enzyme systems.

SMITH KLINE AND FRENCH LABORATORIES

$ 1,250 for the Faculty of Medical Sciences in support of the Smith Kline and French Lecturership Fund.

SOCIAL SCIENCES RESEARCH COUNCIL

(1) £3,023 for the Department of Anthropology for the preparation of a Themes in Papua New Guinea Highlands ethnography.

(2) £195 for the Department of Anthropology for British/French conference expenses.

(3) £15,220 and £2,201 for the Bartlett School of Architecture and Planning for the study of employment and mobility in inner urban areas.

(4) £2,747 for the Bartlett School of Architecture and Planning for a political analysis of British rural conservation issues and policies.

(5) £360 for the Bartlett School of Architecture and Planning for a study of party political linkage between the centre and locality.

(6) £15,336 for the Department of Civil and Municipal Engineering for an analysis of road accident data.

(7) £35,039 for the Department of Geography (with the School of Computing Studies of the University of East Anglia) for the development of an algorithm library for spatial data.

(8) £1,611 and £655 for the Department of Geography for a study of the use of land for informal recreation.

(9) £2,307 and £754 for the Department of Phonetics and Linguistics for the study of the structure of an object-verb-subject language.

(10) £11,516 for the Department of Political Economy for the testing of Marxist predictions about Capitalism.

(11) £2,815 for the Department of Political Economy for a study of taxation, incentives and the distribution of income.

(12) £5,372 for the Department of Psychology for a study of the social psychological aspects of unemployment.

(13) £637 for the Department of Psychology for research on the legibility criteria for maps.

(14) £80 for the Department of Psychology for fares to a British/French conference.

STANDARD TELECOMMUNICATION LABORATORIES (AND OTHERS)

(1) £20,000 for the Department of Electronic and Electrical Engineering for research on zinc oxide thin film deposition.

(2) £300 per annum to the Department of Electronic and Electrical Engineering in support of a CASE studentship.

LADY STEWART

The gift of a portrait of Sir William Jones, the father of Comparative Philology, the study of which is still being maintained under the aegis of the Classical Departments of this College.

UNITED KINGDOM ATOMIC ENERGY AUTHORITY

(1) £49,050 and £1,362 for the Department of Chemical and Biochemical Engineering for scale up crystallisation kinetics and crystalliser design.

(2) £1,204 and £399 for the Department of Chemistry for the study of the theory of fast ion conduction.

(3) £2,200 for the Department of Physics and Astronomy for the extrapolation of ionisation and excitation rate coefficients.

(4) £1,200 for the Department of Physics and Astronomy for the study of image processing techniques for atmospheres and surfaces.

(5) £400 for the Department of Physics and Astronomy for the study of electron impact ionisation from metastable states.

(6) £6,815 for the Department of Statistics and Computer Science, a contribution to the cost of Data Link between UCL and Norway.

UNITED STATES PUBLIC HEALTH SERVICE

(1) $ 32,992 for the Department of Chemistry for the study of conformations of psychoactive substances.

(2) $ 20,000 for the Department of Chemistry for the study of three-dimensional structure of protein molecules.

(3) $ 3,000 for the Department of Physiology for a Fellowship Institution Allowance.

(4) $ 48,188 for the Department of Zoology and Comparative Anatomy for the study of immunogenetic regulation of T-macrophage interaction.

UNITED STATES AIR FORCE

(1) $ 13,027 for the Department of Physics and Astronomy for research on tropospheric and stratospheric tides.

(2) $ 3,221 for the Department of Physics and Astronomy for spacecraft charging studies in Europe.

UNITED STATES ARMY

$ 46,000 for the Department of Electronic and Electrical Engineering for research on surface acoustic waves and acoustic microscopy for NDT.

WATER RESEARCH CENTRE

£201 for the Department of Civil and Municipal Engineering for the development of a new flocculation test method.

WELLCOME TRUST

(1) £44,145 and £866 for the Department of Anatomy and Embryology for the study of purinergic nerves and their possible implication in clinical medicine.

(2) £43,041 and £2,627 for the Department of Anatomy and Embryology for studies in neuroanatomy and neurophysiology.

(3) £9,135 for the Department of Anatomy and Embryology (History of Medicine Unit) for the study of health care on migrant vessels.

(4) £7,182 for the Department of Anatomy and Embryology for the study of the role of transmitter in the development of the neuromuscular junction.

(5) £6,724 and £1,887 for the Department of Anatomy and Embryology (History of Medicine Unit) in support of intercalated B.Sc. students.

(6) £6,295 for the Department of Anatomy and Embryology for research on the history of medicine.

(7) £5,842 for the Department of Anatomy and Embryology (History of Medicine Unit) to study the origins of Psychoanalysis.

(8) £2,400 for the Department of Anatomy and Embryology for studies in visual cortical physiology.

(9) £2,170 for the Department of Anatomy and Embryology for the study of experimental anaesthesia dolorosa.

(10) £2,116 for the Department of Anatomy and Embryology, a fellowship for studies on synaptic organisation in the central nervous system.

(11) £915, £305 and £305 to the Department of Anatomy and Embryology for vacation scholarships.

(12) £1,092 for the Department of Anatomy and Embryology for the study of the visual cortex of the monkey.

(13) £571 for the Department of Anatomy and Embryology for a study of behaviour of primordial germ cells in the mouse.

(14) £172 for the Department of Anatomy and Embryology for a study of hiccocampal function.

(15) £7,267 for the Department of Biophysics for a study of intracellular calcium during the activity of fast and slow mammalian muscles.

(16) £1,500 for the Department of Biophysics for studies of acetylcholine in skeletal muscle.

(17) £17,708 for the Department of Chemistry for studies on histamine secretion from the mast cell.

(18) £508 for the Department of Chemistry for a study on nerve growth factor and its anti-serum.

(19) £244 and £183 for the Department of Pharmacology for vacation scholarships.

(20) £1,839 for the Department of Physiology for research on muscular contraction using nuclear magnetic resonance and other techniques.

(21) £750 for the Department of Physiology for the study of the proteins of the foetal pig cerebrospinal fluid.

(22) £366 and £294 for the Department of Physiology for vacation scholarships.

(23) £551 for the Department of Zoology and Comparative Anatomy for research on immunity to the herpes simplex virus.

(24) £6,232 for the Department of Zoology and Comparative Anatomy for the characterisation of T suppressor cells.

DR H. WINSLEY-STOLZ

A gift to the Department of Hebrew and Jewish Studies, of an etching entitled 'Jerusalem Rebuilt', by Abraham Yakin.

GIFTS TO THE LIBRARY

LORD ANNAN

Books on economics and education.

SIR VAHÉ BAIRAMIAN

Seven monographs issued by the Department of Antiquities, Beirut.

THE BAWDEN FUND AND THE FRIENDS OF U.C.L.

About 500 items from the Ian Kenyur-Hodgkins collection of the works of Laurence Housman.

DRUMMOND TRUST

A set of the Nutrition Foundation Bulletin.

MR W. A. HENDERSON

Letterbooks relating to the partnership of W. R. Henderson and Balfour Williamson 1880-1893 (Latin-American Business Archives).

LORD HOLFORD (THE LATE)

A bequest of 263 items relating to Town Planning.

DR PHYLLIS KABERRY (THE LATE)

A bequest of over 500 items dealing with anthropology.

MISS M. POSLETHWAITE

A copy of the *Letters of Claudio Tolomei* printed by Giovanni Griffio, Venice, 1589.

HIS HONOUR HUGH MACDONALD PRATT

Minutes and account books of the Norwegian Club 1917-1939.

RIKSFORENINGEN FOR SVENSKHETENS BEVARANDE I UTLANDET

One hundred books from Svenska National-foreningens Centralbibliotek for Tuberkulossjukvård-anstalter.

SOCIETY OF AUTHORS

A set of the published volumes of the James Joyce Archive which is being issued by Garland Publishing, Incorporated.

APPENDIX VII

COLLEGE ACCOUNTS 1978-79

The Balance Sheet and the Income and Expenditure Account for the year will be found on pages 131-3.

BALANCE SHEET

LIABILITIES

The Capital Account reflects a net increase of £39,017 due mainly to the inclusion of the Redemption Fund previously shown separately.

ASSETS

Freehold and Leasehold Land and Building increased by £6,679.

TRUST FUNDS

The College holds endowments in the form of 226 separate trust funds with a total value of £2,251,745. The funds yielded a total income of £245,700.

INCOME AND EXPENDITURE

The expenditure for the year exceeded income by £486,922. The deficit carried forward on the Income and Expenditure Account was £147,124.

Income exceeded that for 1977-78 by £2,424,484. Grants from the Court of the University increased by £1,075,973. Fees increased by £464,306 and grants for research increased by £604,633.

Expenditure, including allocations to and from Reserves, was £2,808,623 more than in 1977-78. An additional £1,727,386 net was spent on academic departments and services. Maintenance of premises cost an additional £585,539 net. An additional £224,668 net was spent on administration, and miscellaneous expenditure increased by £271,030 net.

Income and expenditure under the main classifications in 1978-79 as compared with 1977-78 and with the corresponding year of the previous quinquennium, are shown in the following table.

	1973-74		1977-78		1978-79	
EXPENDITURE	£	%	£	%	£	%
Salaries and Pensions of Teaching Staff	3,802,098	35.7	6,722,726	33.1	7,558,759	32.7
Departmental Expenses, including Library	2,609,616	24.4	4,801,379	23.6	5,088,099	22.0
Research Grants	1,689,321	15.9	3,548,940	17.5	4,153,573	18.0
Maintenance of Premises	1,457,064	13.7	3,212,272	15.8	3,797,811	16.4
Administration	699,398	6.5	1,332,558	6.6	1,557,226	6.7
Other	402,669	3.8	687,219	3.4	958,249	4.2
	£10,660,166	100.0	£20,305,094	100.0	£23,113,717	100.0
INCOME						
Endowments	113,898	1.1	175,899	0.9	204,092	0.9
Grants	8,134,293	74.8	12,645,506	62.6	13,721,479	60.6
Donations	260,317	2.4	451,406	2.2	531,990	2.3
Fees	466,842	4.3	3,085,890	15.2	3,550,196	15.7
Grants for Research	1,689,321	15.5	3,548,940	17.6	4,153,573	18.4
Research Training Support Grants	46,461	0.4	58,080	0.3	61,334	0.3
Other	159,514	1.5	236,590	1.2	404,131	1.8
	£10,870,646	100.0	£20,202,311	100.0	£22,626,795	100.0

EXTRA-BUDGETARY ACTIVITIES

The College administers the finances of many research projects supported from outside sources. 561 were being pursued actively at 31 July 1979. Income and expenditure increased from £3,548,940 in 1977-78 to £4,153,573 in 1978-79.

UNIVERSITY COLLEGE LONDON

BALANCE SHEET 31 JULY 1979

31.7.78		£	31.7.78		£
16,244,412	Capital Account	16,283,429		Freehold Land and Buildings—See Note below	16,067,966
39,921	Redemption Fund	—	*16,070,086*		
1,025	Loan	—	*416,165*	Leasehold Land and Buildings	411,606
16,285,358		16,283,429	*16,486,251*		16,479,572
			129,556	Capital Works in Progress	50,484
			2,717,505	Investments at lower of Cost and Market Value .. .. *(Market Value at 31 July 1979: £3,608,498; 31 July 1978: £2,789,379)*	3,608,498
4,201,015	Reserves and Amounts Set Aside	4,553,457			
1,832,408	Earmarked Funds	1,405,832	*930,732*	Expenditure Recoverable from Grants ..	1,407,924
1,241,143	Current Liabilities	1,758,631	*3,295,880*	Current Assets	2,454,871
23,559,924		24,001,349	*23,559,924*		24,001,349
2,127,233	Trust Funds	2,251,745	*2,127,233*	Trust Funds	2,251,745

NOTE

Freehold and Leasehold Land and Buildings

(a) Freehold and leasehold land and buildings in the accounts do not include fixtures, furniture and equipment. The cost of these assets is written out of the accounts on purchase or on completion of a project against the corresponding grants or other monies received and are not therefore included in capital account.

(b) Freehold land and buildings are stated at a valuation made in 1959 on the basis of the then current land values and building costs with subsequent additions at cost or valuation, as estimated by the College authorities on a basis which excludes professional fees. No depreciation is charged because an annual allocation is made to long-term maintenance fund.

(c) There are commitments for future expenditure on capital projects which amount to £336,000 at 31 July 1979 *(1978 £347,000)*.

£25,687,157	£26,253,094	*£25,687,157*	£26,253,094

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 JULY 1979

EXPENDITURE

1977-78		1978-79	
£		£	£
	Administration		
1,017,796	Salaries	1,203,293	
256,427	Advertising, Printing, Stationery, Postage and Telephone	264,377	
59,290	Other Expenses (including Professional Fees)	64,719	
(1,333,513)			1,532,389
	Academic Departments		
6,452,845	Salaries of Teaching Staff	7,196,928	
1,904,650	Departmental Wages: Technical Staff	2,015,897	
678,989	Secretarial Staff	763,928	
1,223,526	Departmental and Laboratory Maintenance	1,524,825	
3,548,940	Research Expenditure covered by grants on Research Contracts (contra opposite)	4,153,573	
16,732	Other Expenditure	12,706	
(13,825,682)			15,667,857
	Academic Services		
344,527	Libraries: Salaries 387,518		
286,349	General Expenditure 338,038	725,556	
16,700	Central Photographic Service	16,973	
19,232	Audio Visual Aids	24,605	
8,221	Radiation Hazards	7,466	
–	Miscellaneous	177	
–	Small Group Teaching	165	
(675,029)			774,942
	Maintenance of Premises		
703,065	Rates	598,440	
63,001	Insurance	66,687	
	Rents and other payments for use of buildings:		
31,065	Student Accommodation 31,093		
59,656	Other Buildings 110,579	141,672	
480,947	Heat, Light, Water and Power	513,480	
	Repairs and Maintenance of Buildings including amounts set aside for long-term maintenance	2,112,773	
1,675,127	Wages of Porters and Attendants	366,806	
273,623	Other Expenses	52,356	
52,505			
(3,338,989)			3,852,214
	General Educational		
20,415	Examinations	20,084	
45,377	Scholarships and Prizes	77,928	
15,810	Public Lectures	17,780	
17,000	Staff Attendance at Conferences	19,000	
52,385	Student Vacation Grants	66,113	
717	Miscellaneous	1,604	
(151,704)			202,509

INCOME

1977-78		1978-79	
£		£	£
	Endowments		
	Income of Trust Funds appropriated for purposes specified by Trusts against expenditure included opposite		204,092
175,899			
	Donations and Subscriptions (including Ministry of Overseas Development £52,500 – 1977-78 £100,500)		
	Appropriated for:		
8,504	Libraries	9,186	
22,353	Scholarships and Bursaries	44,946	
330,103	Salaries and Superannuation	254,536	
90,446	Departmental and Laboratory Maintenance	223,322	
(451,406)			531,990
	Grants from University Court		
11,444,000	General	12 712,000	
405,000	Supplementary	203,000	
11,849,000			12,915,000
	Earmarked Grants		
2,536	Computer Accounting System	7,200	
14,000	Food Industry Collaboration	–	
2,270	Hayter Committee	1,506	
40,148	Minor Building Projects	115,949	
25,267	M.Sc. Course in Ergonomics	30,737	
1,500	Parry	2,647	
703,065	Rates	598,440	
120	Small Grants – Humanities	–	
7,600	University College/Royal Free Medical Project – Administration	8,500	
–	Supplementary Maintenance	41,500	
(796,506)			806,479
58,080	Research Council Training Support Grants		61,334
3,085,890	Fees		3,550,196
3,548,940	Grants for Research, including research contracts (contra opposite)		4,153,573
88,224	Contributions for Services Rendered		87,814
14,941	College Properties – Rents receivable		24,258
	Other Items:		
	Special Funds Appropriation:		
11,043	Earmarked Funds	24,714	
126,538	Interest Receivable	226,488	
30,519	Miscellaneous	40,857	
(168,100)			292,059

27,763	Collegiate Theatre and Shenley ..	27,691		10,000	Administrative Staff Training ..	9,045	
3,096	Salaries: Wardens of Halls of Residence	4,689		--	Academic Departments	14,000	
53,479	Student Health Service	65,516			Departmental and Laboratory		
3,044	Students' Purposes Fund	3,810		414,237	Maintenance	647,083	
694	Crabb Robinson and Ealing Hall Funds	733		53,811	Academic Services	109,418	
11,498	Central Admissions Scheme ..	14,150		187,534	Repairs and Maintenance ..	61,713	
7,675	Miscellaneous	5,398		22,868	Minor Works	38,259	
12,158	Student Counsellor Service ..	13,664		15,846	Student Vacation Grants ..	11,461	
8,629	Careers Office	9,517		6,069	Miscellaneous	3,816	
75,000	Hardship Fund	16,000			Development Programme:		
(392,085)			382,299	41,694	Relocation and Other Costs ..	41,694	
	Miscellaneous			752,059			936,489
269,881	Staff Pensions	295,522			Earmarked Funds:		
4,898	Grants from Benevolent Funds ..	4,103			Minor Building Projects		(5,241)
903	Interest on Overdrafts, etc. ..	1,094		(6,251)	Small Group Teaching		2,938
33,686	Sundries	43,154		2,938			
1,000	150th Anniversary	2,014		20,985,732			23,560,981
310,368			345,887				
33,680	Transfer to Equipment and Furniture		56,860				
	Capital Expenditure met from Income:						
39,138	Minor Building Projects 136,822						
19,466	Other 44,377		181,199				
--	Provision for Salary Awards ..		156,616				
20,119,654			23,152,772				
	Allocation to Reserves at 31 July 1979						
34,675	Transfer to College Fund	100,000					
	Revenue Grants						
9,045	Administrative Staff Training ..	8,842					
14,000	Academic Departments	15,650					
	Departmental and Laboratory						
647,083	Maintenance	615,175					
109,418	Academic Services	84,028					
61,713	Repairs and Maintenance of Building	(6,343)					
38,259	Minor Works	57,267					
11,461	Student Vacation Grants ..	347					
3,816	Miscellaneous	1,812					
	Development Programme:						
41,694	Relocation and Other Costs ..	41,694					
(971,164)			918,472				
	Earmarked Funds						
(5,241)	Minor Building Projects		(26,114)				
2,938	Small Group Teaching		2,775	102,783	Excess of Expenditure over Income for the Year		486,922
£21,088,515			£24,047,903	£21,088,515			£24,047,903
	Excess of Expenditure over Income for						
102,783	the Year		486,922				
339,798	Balance at 31 July 1979 Carried to Reserve		(147,124)	442,581	Balance at 1 August 1978		339,798
£442,581			£339,798	442,581			339,798